DRAFT DATE: 08 OCT, 2002

NAD

SERVICE MANUAL

T 752

AV SURROUND SOUND RECEIVER

T 752

AV SURROUND SOUND RECEIVER

SAFETY INFORMATION

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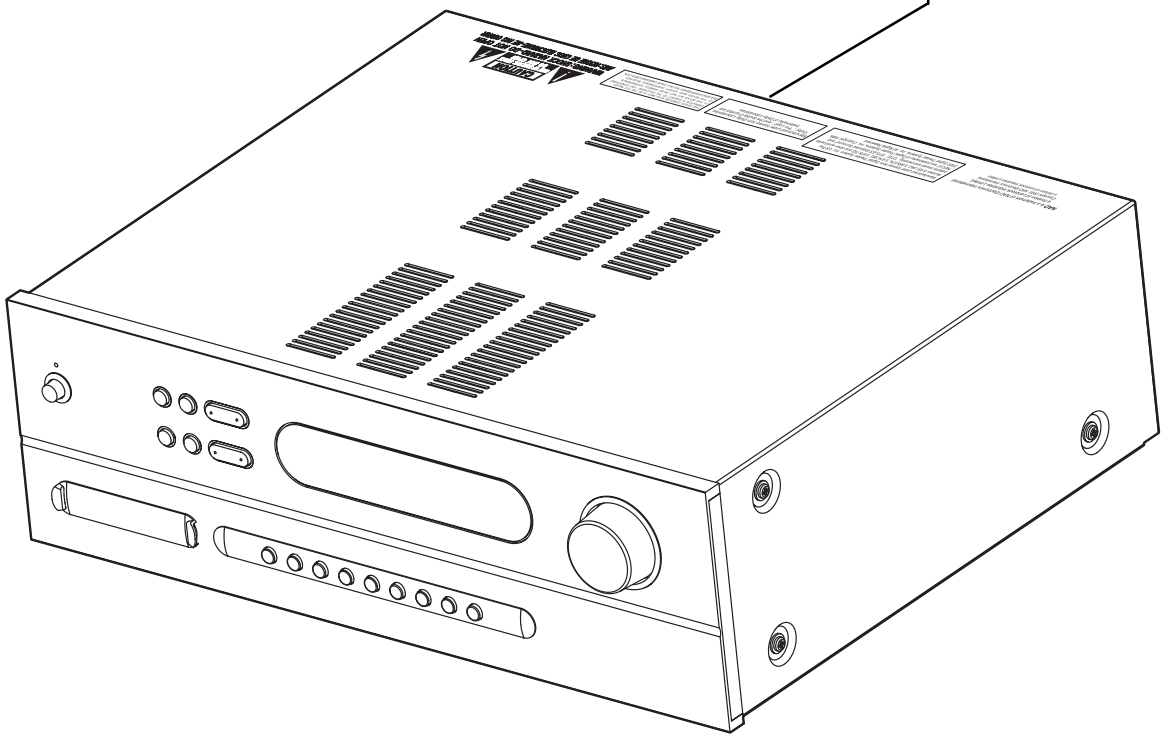
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, (2) THIS DEVICE MUST ACCEPT INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

WARNING: SHOCK HAZARD - DO NOT OPEN
AVIS: RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR



SERVICE SAFETY PRECAUTIONS

1. Replacing the fuses

CAUTION:
FOR CONTINUED PROTECTION AGAINST THE RISK OF FIRE REPLACE ONLY WITH SAME TYPE OF FUSE.

Reference Designator	Part Number	Description
F751*AH	33-0160001-00-48	Fuse 8A 250V Time Lag 5x20 MM UL/CSA
F751*C	33-0131002-00-48	Fuse 5A 250V Time Lag 5x20 MM SEMKO/VDE
F752*AH	33-0111006 -00-48	Fuse 1.6A 250V Time Lag 5x20 MM UL/CSA/VDE/SEMKO
F752*C	33-0151006 -00-48	Fuse 800mA 250V Time Lag 5x20 MM UL/CSA/VDE/SEMKO

NOTE:
<*AH > : USA, CANADIAN MODEL ONLY.
<*C > : EUROPEAN MODEL ONLY.

2. Safety check out

(Only U.S.A. model)

Before returning the product to the customer, make leakage current or resistance measurements to determine that exposed parts are acceptably insulated from supply circuit.

Parts marked with the symbol ⚠ are critical with regard to the risk of fire and electric shock.
Replace only with parts recommended by the manufacturer.

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SPECIFICATIONS

POWER AMPLIFIER SECTION

Rated distortion	(Rated power level into 8 ohms, THD 20 Hz-20 kHz FL/C/FR)	≤ **0.1 %**
	(Rated power level into 8 ohms, THD 20 Hz-20 kHz SL/SR)	≤ **0.1 %**
Input Sensitivity	(ref. 8 ohms, 1 kHz)	**200 ± 20 mV**
S/N Ratio	(A-wtd, 1kHz, 1 W, 8 ohm, SL/SR)	**≥ - 80 dB**
	(A-wtd, 1kHz, 80 W, 8 ohm, SL/SR)	**≥ - 96 dB**
Frequency Response	(20 Hz - 20 kHz)	**0 ± 0.8 dB**
Channel Balance	(1 dB to -40 dB, 1 kHz)	≤ **2 dB**
	(-41 dB to -50 dB, 1 kHz)	≤ **3 dB**
Audio muting at 1 kHz		**≥ 55 dB**
Subwoofer out, 500 mV in	(THD at 2 V O/P, 100 Hz)	≤ **0.5 %**
Crosstalk	(500 mV input, 10 W, 1 kHz)	**≥ -70 dB**

Controls

Bass	(at 500 mV in, 1 W out, 100 Hz)	**± 10 dB ± 2 dB**
Treble	(at 500 mV in, 1 W out, 10 kHz)	**± 10 dB ± 2 dB**

DOLBY DIGITAL SECTION

Channel Difference(FL ref. Track 30)			**± 1.2 dB**
Frequency Response @ Dolby config.2		SL Track 46 200 - 20 kHz	**± 0.8 dB**
		SR Track 47 200 - 20 kHz	**± 0.8 dB**
		C Track 44 200 - 20 kHz	**± 0.8 dB**
Harmonic Distortion (1 W, Audio LPF, Dolby Config.1)		FL Track 65 997 Hz	≤ **0.08 %**
		FR Track 67 997 Hz	≤ **0.08 %**
		SL Track 68 997 Hz	≤ **0.08 %**
		SR Track 69 997 Hz	≤ **0.08 %**
		C Track 66 997 Hz	≤ **0.08 %**
S/N Ratio	(31 for O/P 1 W, Track 35)	CCIR / ARM	**≥ 65 dB**
		Audio LPF	**≥ 70 dB**
		A-wtd	**≥ 70 dB**
Channel Separation	(1 W, 20 kHz LPF)	Track 65 997 Hz	**≥ 75 dB**

DOLBY PRO LOGIC II SECTION

Frequency Resporse

I/P mode : L, R	: 1 V in, 1 W, Ch L/R	40 Hz	**0 ± 1.5 dB**
		20 Hz	**0 ± 0.8 dB**
I/P mode : L, R	: 1 V in, 1 W, Ch C	300 Hz	**0 ± 0.8 dB**
		20 Hz	**0 ± 0.8 dB**
I/P mode : L, R	: 1 V in, 1 W, Ch SL/SR	40 Hz	**0 ± 1.5 dB**
		20 Hz	**-3 ± 1.0 dB**
S/N Ratio (200 mV in, 1 W, A-WTD w/ 1 k termination)			
I/P mode : L, R	: 1 kHz, Ch L/R		**≥ 65 dB**
I/P mode : L, R	: 1 kHz, Ch C		**≥ 65 dB**
I/P mode : L, R	: 1 kHz, Ch SL/SR		**≥ 65 dB**
THD (2.2 V in, 1 W, w/ 80 kHz LPF, 1 kHz)			≤ **0.2 %**

AM TUNER SECTION

Input level is expressed as the reading in open circuit of 75-ohm source impedance signal generator		
Usable sensitivity	(999/1000 kHz)	**≤ 30 dBuv**
S/N Ratio	(5 mV in)	**≥ 30 dB**
THD	(5 mV in)	**≤ 3 %**
IF Rejection	(450 kHz)	**≤ 36 dB**
Image Rejection	(F+2xIF)	**≥ 28 dB**
Selectivity		**≥ 17 dB**
Output		**110 ± 20 mV**
Loop sensitivity	(20 dB S/N)	
	999/1000 kHz	**≤ 66 dB**
	603/600 kHz	**≤ 66 dB**
	1404/1400 kHz	**≤ 66 dB**
Frequency Response	(100 - 2.3 kHz, 5 mV)	**± 6 dB**

FM TUNER SECTION

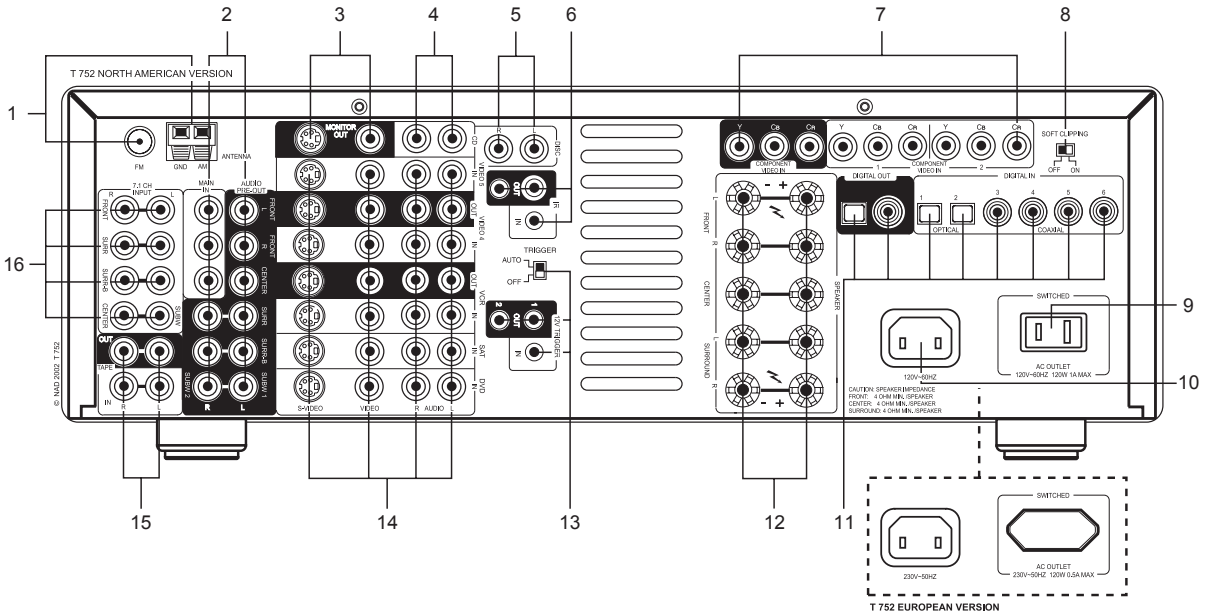
			*C	*AH
Input level is expressed as the reading in open circuit of 75-ohm source impedance signal generator				
Usable sensitivity	(98 MHz)		**≤ 15 dBuv**	**≤ 15 dBuv**
S/N Ratio	(60 dB, IHF wtd)	Mono	**≥ 65 dB**	**≥ 65 dB**
		Stereo	**≥ 60 dB**	**≥ 60 dB**
Frequency Response	(20 Hz - 15 kHz, 60 dBm)		**0 ± 1.5 dB**	**0 ± 1.5 dB**
Channel Separation	(60 dBm)	100 Hz	**≥ 30 dB**	**≥ 30 dB**
		1 Hz	**≥ 35 dB**	**≥ 35 dB**
		10 Hz	**≥ 20 dB**	**≥ 25 dB**
Alternate Channel Selectivity (40 dBm, ± 400 kHz)			**≥ 60 dB**	**≥ 45 dB**
Capture Ratio	(40 dBm)		**≤ 3 dB**	**≤ 3 dB**
AM Suppression (60 dBm, 100% Mod. FM, 30% Mod. AM)			**≥ 40 dB**	**≥ 40 dB**
Image Rejection	(119.4 MHz)		**≥ 65 dB**	**≥ 65 dB**
I.F. Rejection	(10.7 MHz)		**≥ 78 dB**	**≥ 65 dB**
Pilot Suppression	(60 dBm)		**≥ 60 dB**	**≥ 60 dB**
THD (60 dBm, L=R 75 kHz for AH, 40 kHz Dev for C)		Mono	**≤ 0.8 %**	**≤ 0.8 %**
		Stereo	**≤ 1 %**	**≤ 1 %**
Auto-Search Sensitivity		On	**≥ 24 dBuv**	**≥ 24 dBuv**
		Off	**≤ 15 dBuv**	**≤ 15 dBuv**
RDS decode Sensitivity			**≤ 26 dBuv**	**-**

PHYSICAL SPECIFICATIONS

Dimensions (Width x Height x Depth)	**435 x 133 x 349 mm**
Net Weight	**14.40 Kg (31.68 lbs)**
Shipping Weight	**16.00 Kg (35.20 lbs)**

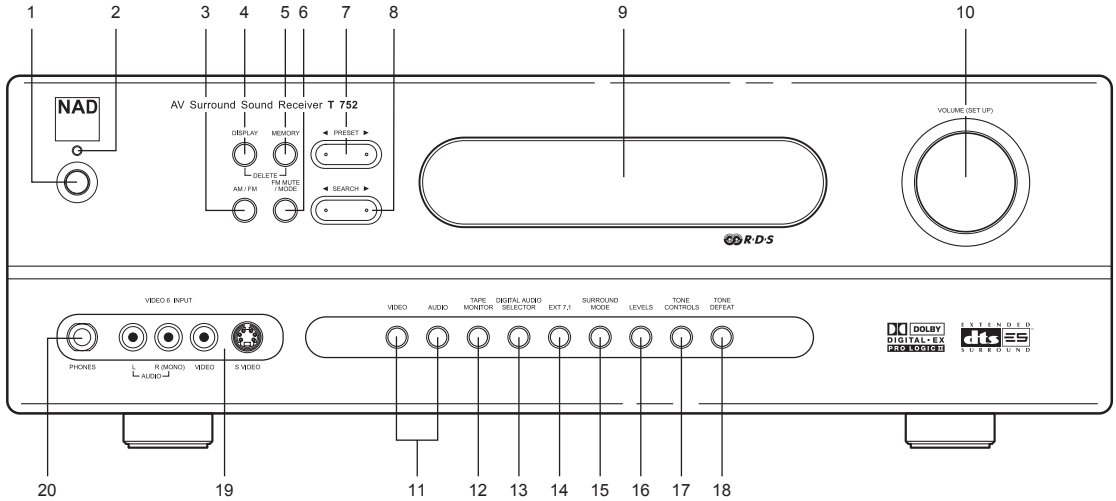
REAR PANEL / FRONT PANEL VIEW

REAR PANEL



1. FM & AM ANTENNA
2. MAIN IN / AUDIO PRE-OUTS / SUBWOOFER OUT
3. MONITOR OUT
4. CD INPUT
5. DISC INPUT
6. IR INPUT & OUTPUT
7. COMPONENT VIDEO IN & COMPONENT VIDEO OUT
8. SOFT CLIPPING ON/OFF
9. SWITCHED POWER OUTLETS
10. AC POWER CORD
11. DIGITAL AUDIO INPUTS & DIGITAL AUDIO OUTPUT
12. FRONT, CENTER & SURROUND SPEAKERS
13. 12V TRIGGER INPUT & OUTPUT
14. VIDEO 1 - VIDEO 5 (AUDIO & VIDEO)
15. TAPE INPUT & OUTPUT
16. 7.1 CHANNEL INPUTS

FRONT PANEL



1. POWER
2. STAND-BY
3. AM / FM
4. DISPLAY
5. MEMORY
6. FM MUTE / MONO
7. PRESET DOWN / UP
8. SEARCH DOWN / UP
9. VFL DISPLAY
10. VOLUME
11. VIDEO & AUDIO
12. TAPE MONITOR
13. DIGITAL AUDIO SELECTOR
14. EXT. 7.1
15. SURROUND MODE
16. LEVELS
17. TONE CONTROLS
18. TONE DEFEAT
19. VIDEO 6 INPUT
20. PHONES

DISASSEMBLY INSTRUCTIONS

1. Remove machine screws M4.0 x 8.0 (**1** to **6**) from the side panels.
Remove tapping screw 3.0 x 8.0 (**7** to **10**) from the back panel.
Refer to **Figure No. 1**.

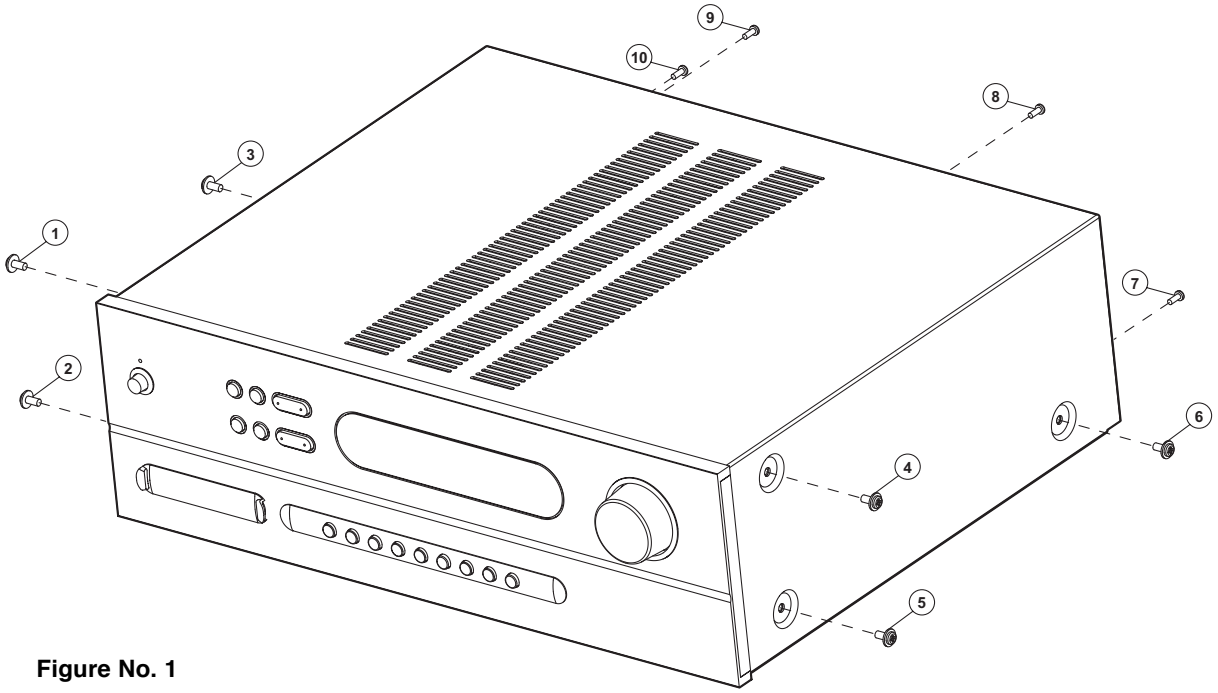


Figure No. 1

2. Pull both sides of the TOP COVER slightly outwards **11** and tilt approx. 35 ° and then remove in the
direction as indicated by the arrow **12**. Refer to **Figure No. 2**.

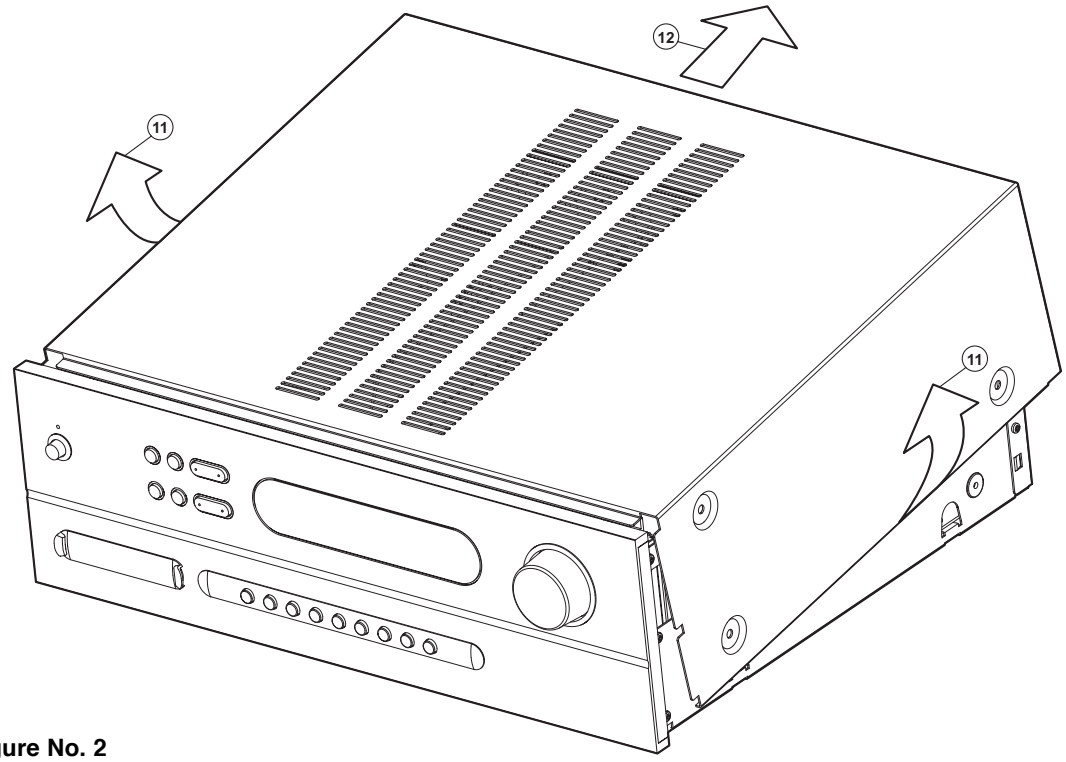
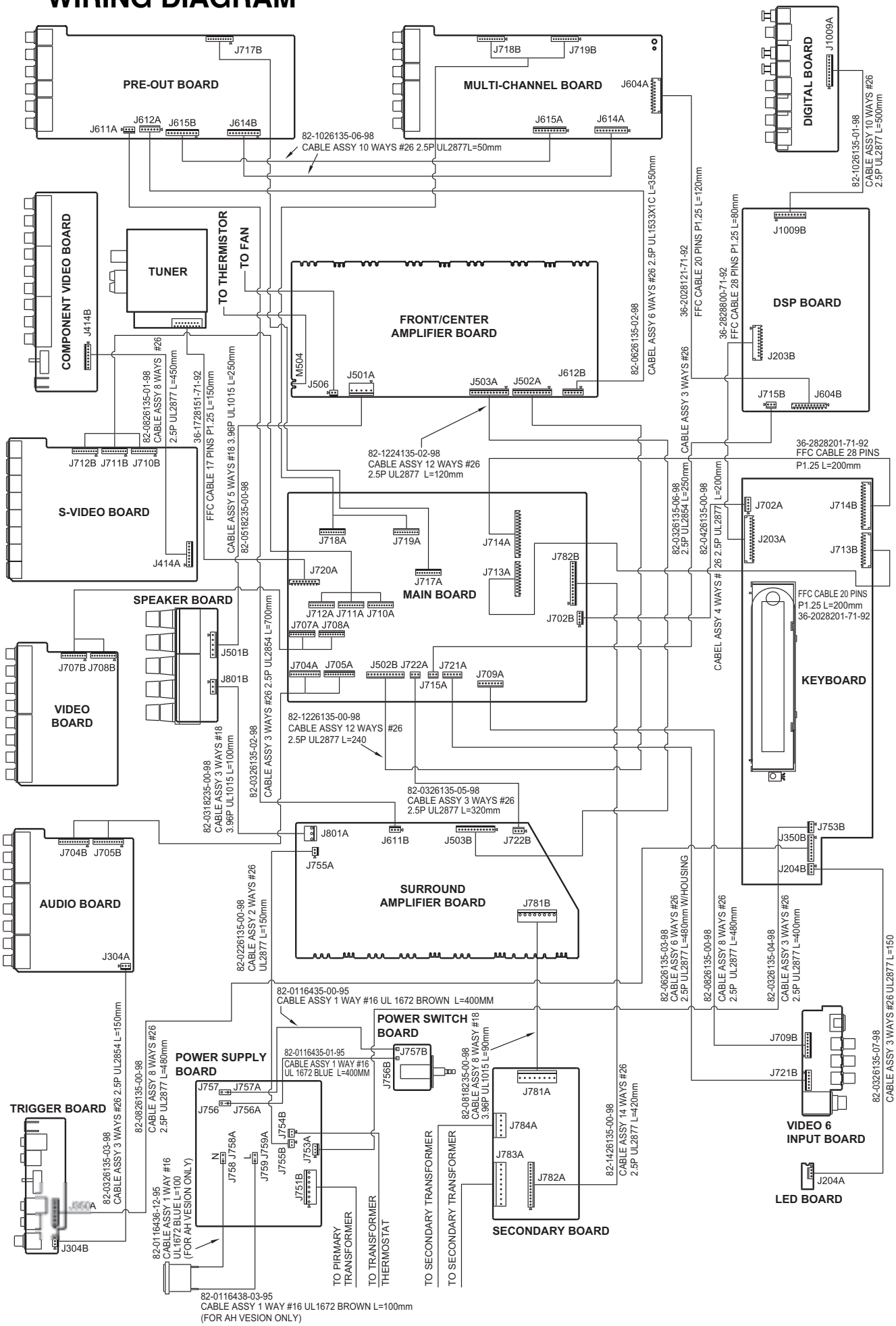


Figure No. 2

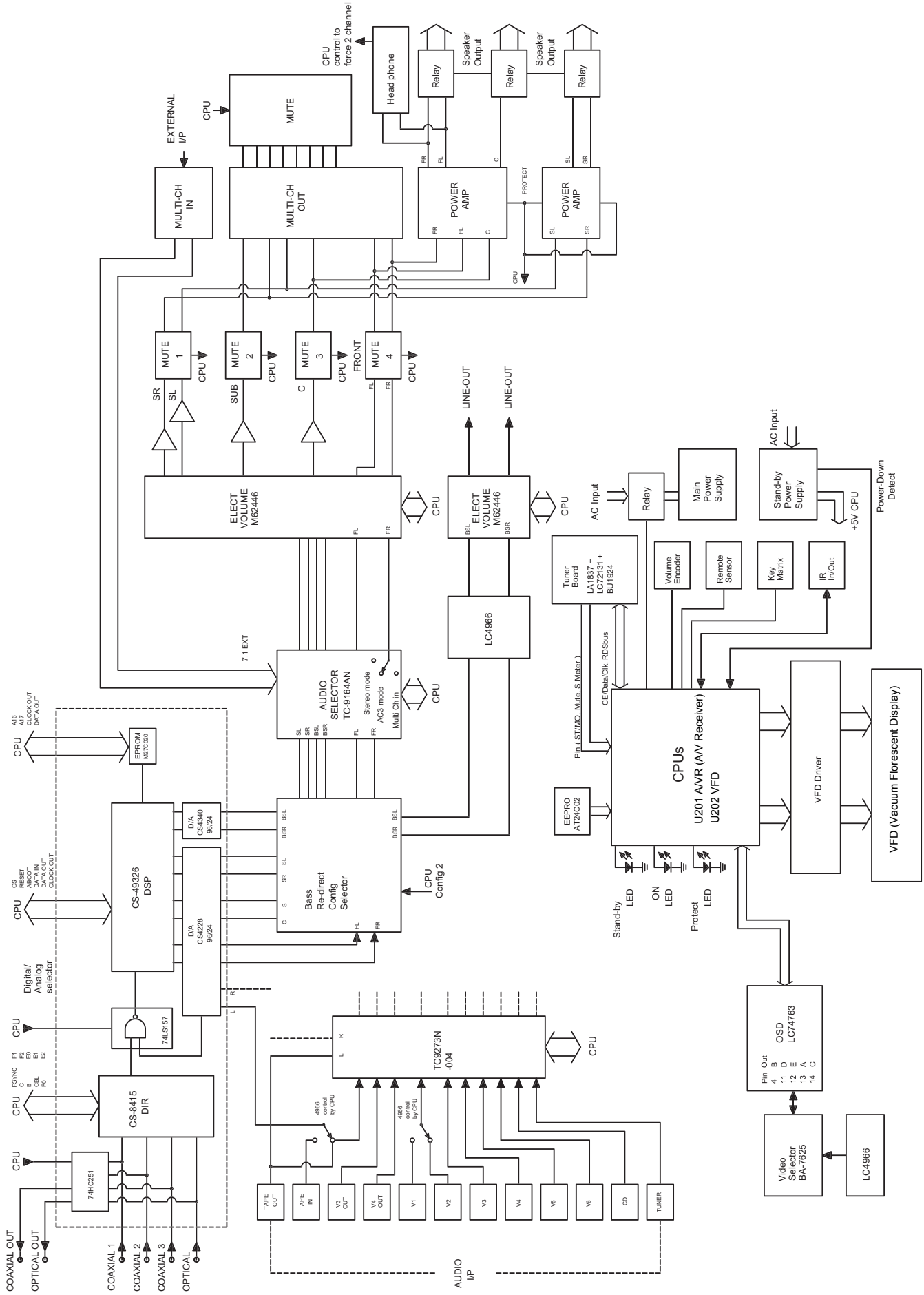
WIRING DIAGRAM



Part No.	Description		Location	Start	End
Normal Front and Center Amp Board					
82-1224135-02-98	CABLE ASSY 12 WAYS AWG=26 2.5P UL2877 L=120mm		J503A	FR & C Amp board	Surr Amp Board
Normal Surround Amp Board					
82-0318235-03-98	CABLE ASSY 3 WAYS AWG=18 3.96P UL1007 L=180mm		J504B	Surr Amp Board	FR & C Amp board
82-0818235-00-98	CABLE ASSY 8 WASY AWG=18 3.96P UL1015 L=90mm		J781B	Surr Amp Board	Secondary Board
Normal Component Video Board					
82-0826135-01-98	CABLE ASSY 8 WAYS AWG=26 2.5P UL2877 L=450mm		J414B	Component Video Board	S-Video Board
Normal Digital Input Board					
82-0426135-02-98	CABLE ASSY 4 WAYS AWG=26 2.5P UL2877 L=500mm		J1010A	Digital Input Board	DSP Board
82-1226135-03-98	CABLE ASSY 12 WAYS AWG=26 2.5P UL1533 L=500mm		J1009A	Digital Input Board	DSP Board
Normal Keyboard					
82-0118435-00-98	CABLE ASSY 1 WAY AWG18 UL1007 BLACK L=100mm W/ RING TERMINAL		J201	Keyboard	Subfascia
82-0326135-04-98	CABLE ASSY 3 WAYS AWG=26 2.5P UL2877 L=400mm		J753B	Keyboard	Power Supply Board
82-0426135-00-98	CABEL ASSY 4 WAYS AWG=26 2.5P UL2877 L=200mm		J702A	Keyboard	Main Board
Normal LED Board					
82-0326135-07-98	CABLE ASSY 3 WAYS AWG=26 UL2877 L=150mm		J204A	LED Board	Keyboard
Normal Main Board					
82-0326135-05-98	CABLE ASSY 3 WAYS AWG=26 2.5P UL2877 L=320mm		J722A	Main Board	Surr Amp Board
82-0326135-06-98	CABLE ASSY 3 WAYS AWG=26 2.5P UL2854 L=250mm		J715A	Main Board	DSP Board
82-0626135-03-98	CABLE ASSY 6 WAYS AWG=26 2.5P UL2877 L=480mm W/HOUSING		J721A	Main Board	Video-6 Board
82-0826135-00-98	CABLE ASSY 8 WAYS AWG=26 2.5P UL2877 L=480mm		J709A	Main Board	Video-6 Board
82-1226135-00-98	CABLE ASSY 12 WAYS AWG=26 2.5P UL2877 L=240mm		J502B	Main Board	FR & C Amp board
Normal Speaker Board					
82-0318235-02-98	CABLE ASSY 3 WAYS AWG=18 3.96P UL1007 L=120mm		J801B	Speaker Board	Surr Amp Board
82-0518235-02-95	CABLE ASSY 5 WAYS AWG=18 3.96P UL1007 L=350mm		J786B	Speaker Board	Secondary Board
82-0518235-03-98	CABLE ASSY 5 WAYS AWG=18 3.96P UL1007 L=300mm		J501B	Speaker Board	FR & C Amp board
Normal Pre-Out Board					
82-0326135-02-98	CABLE ASSY 3 WAYS AWG=26 2.5P UL2854 L=700mm		J611A	Pre-Out Board	Surr Amp Board
82-0626135-02-98	CABEL ASSY 6 WAYS AWG=26 2.5P UL1533X1C L=350mm		J612A	Pre-Out Board	FR & C Amp board
82-1026135-06-98	CABLE ASSY 10 WAYS AWG=26 2.5P UL2877L=50mm		J614B	Pre-Out Board	Multi-Channel Board
82-1026135-06-98	CABLE ASSY 10 WAYS AWG=26 2.5P UL2877L=50mm		J615B	Pre-Out Board	Multi-Channel Board
Normal Power Switch Board					
82-0116435-00-95	CABLE ASSY 1 WAYS AWG=16 UL1672 BROWN L=370mm		J757B	Power Switch Board	Power Supply Board
82-0116435-01-95	CABLE ASSY 1 WAYS AWG=16 UL1672 BLUE L=370mm		J756B	Power Switch Board	Power Supply Board

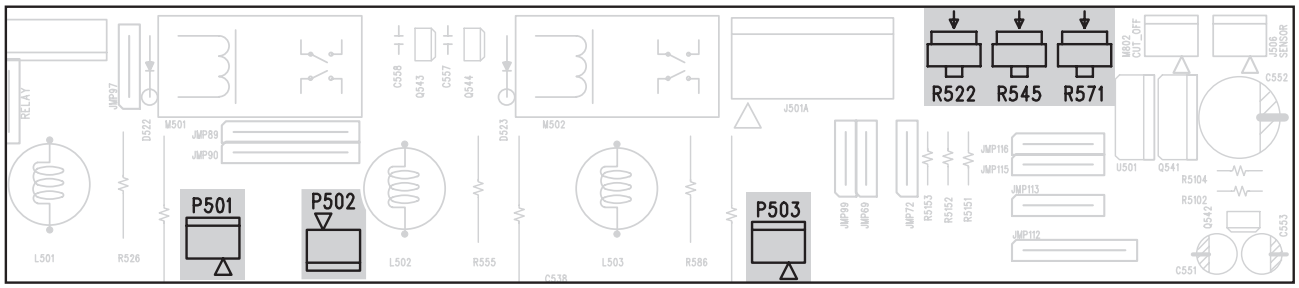
Normal Secondary Board					
82-1426135-00-98	CABLE ASSY 14 WAYS AWG=26 2.5P UL2877 L=420mm		J782A	Secondary Board	Main Board
Normal Trigger Board					
82-0326135-03-98	CABLE ASSY 3 WAYS AWG=26 2.5P UL2854 L=150mm		J304B	Trigger Board	Audio Board
82-0826135-00-98	CABLE ASSY 8 WAYS AWG=26 2.5P UL2877 L=480mm		J350A	Trigger Board	Keyboard
Normal Video-6 Board					
82-0118435-00-98	CABLE ASSY 1 WAY AWG18 UL1007 BLACK L=100mm W/ RING TERMINAL		P4401	Video-6 Board	Chassis
Casing					
36-1728201-71-26	FFC CABLE 17 PINS P1.25 L=200mm		J720C	Main Board	Tuner
36-2028121-71-92	FFC CABLE 20 PINS P1.25 L=120mm		J604C	DSP Board	Multi-Channel Board
36-2028201-71-92	FFC CABLE 20 PINS P1.25 L=200mm		J713C	Main Board	Keyboard
36-2828201-71-92	FFC CABLE 28 PINS P1.25 L=200mm		J714C	Main Board	Keyboard
36-2828800-71-92	FFC CABLE 28 PINS P1.25 L=80mm		J203C	Keyboard	DSP Board
82-0116436-12-95	CABLE ASSY 1 WAY AWG=16 UL1672 BROWN L=100mm		J759	AC Outlet	Power Supply Board
82-0116438-03-95	CABLE ASSY 1 WAY AWG=16 UL1672 BLUE L=100mm		J758	AC Outlet	Power Supply Board

BLOCK DIAGRAM

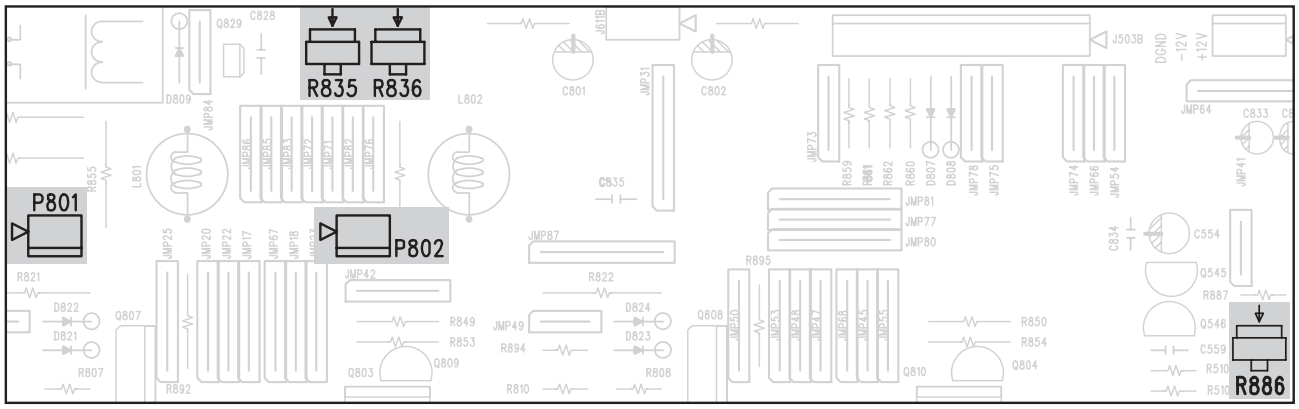


ADJUSTMENT POINT DIAGRAM

FRONT/CENTER AMPLIFIER BOARD



SURROUND AMPLIFIER BOARD



AMPLIFIER ADJUSTMENT

Idle Current

1. Rotate R522 fully clockwise.
2. Connect DC millivoltmeter to P501 (i.e. Across half of R523, 0.22 Ohm resistor).
3. Turn on the unit.
4. Adjust R522 for 1mV reading on voltmeter.
5. Leave power on for at least 5 min, and check for idle current again.
6. Repeat for other channels.

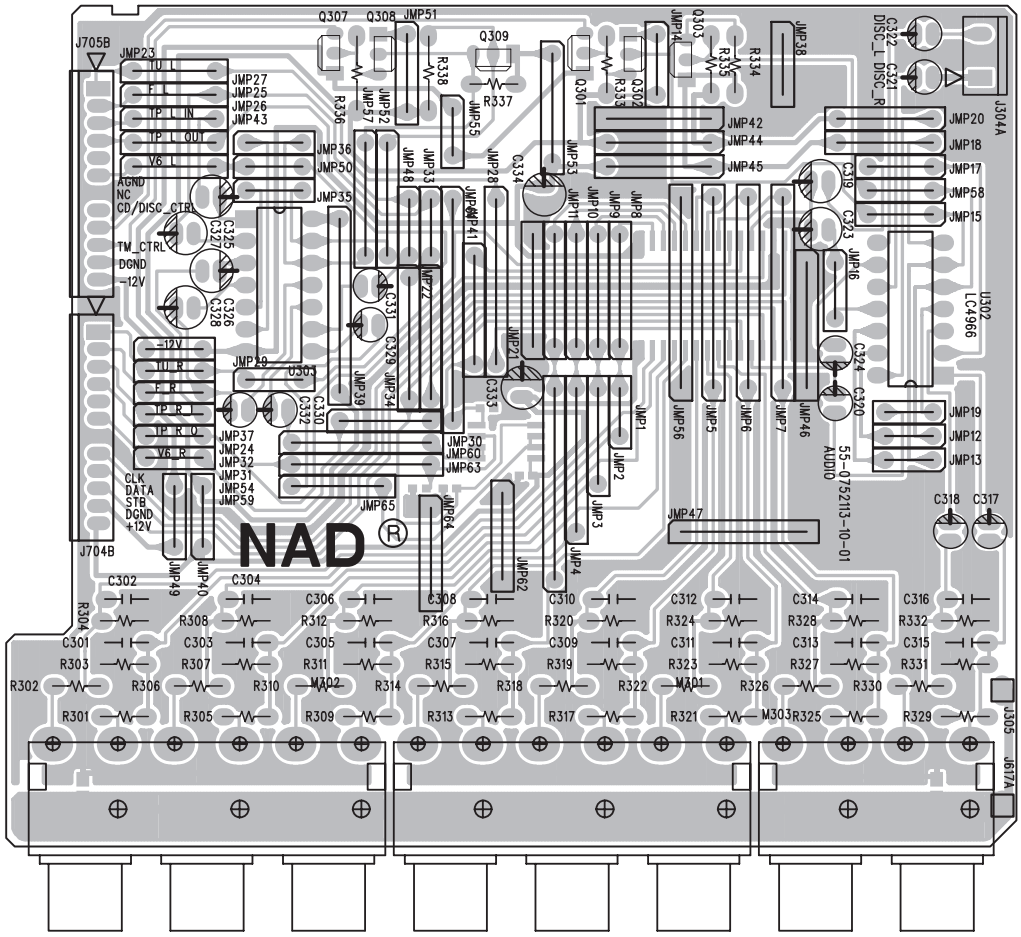
CHANNEL	JUMPER	VR
FL	P503	R571
FR	P502	R545
C	P501	R522
SL	P801	R835
SR	P802	R836

ISC Sensitivity

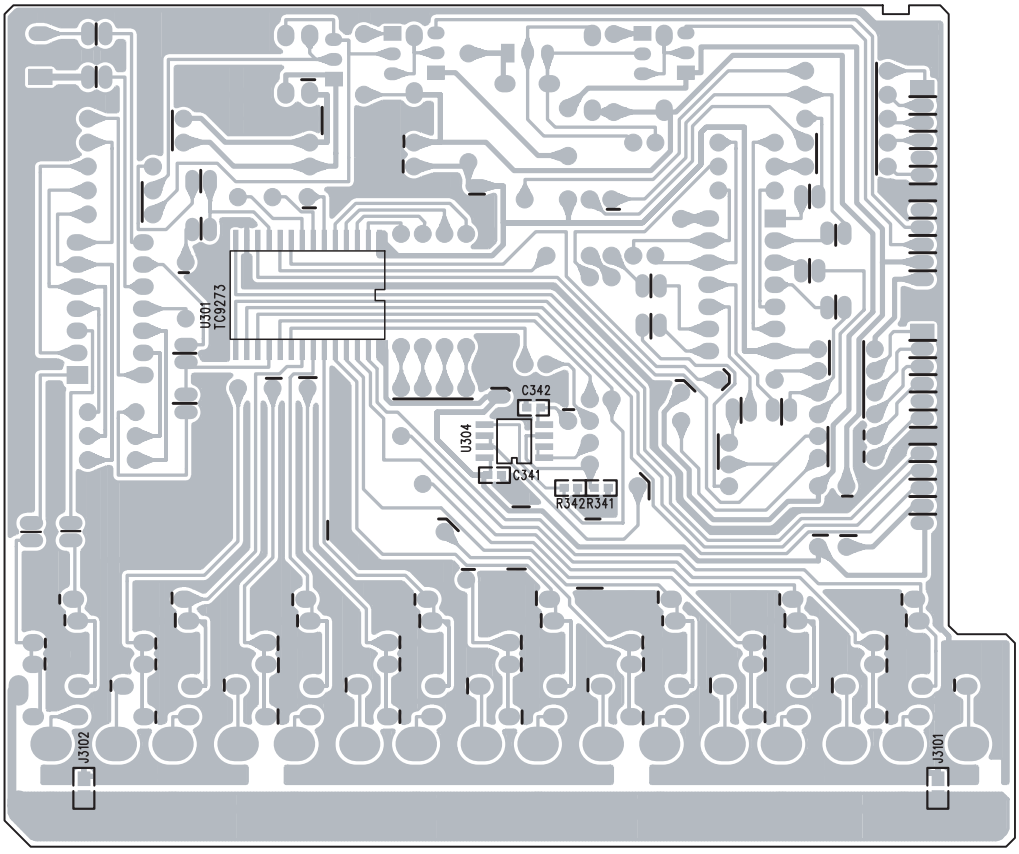
1. Connect 8 ohm loading to all channels.
2. Rotate R886 fully clockwise.
3. Load all channels at full power using 1kHz sine wave.
4. At this time, monitor the THD of the output. Clipping should occur before full power achieved.
5. Rotate R886 counter-clockwise slowly until the THD just below 0.1%.
6. The procedure is finish at this step.
7. Load all channels at full power using 1kHz sine wave with 4 ohm load.
8. The clipping power(at THD 0.1%) should less than 85W.

PCB LAYOUT

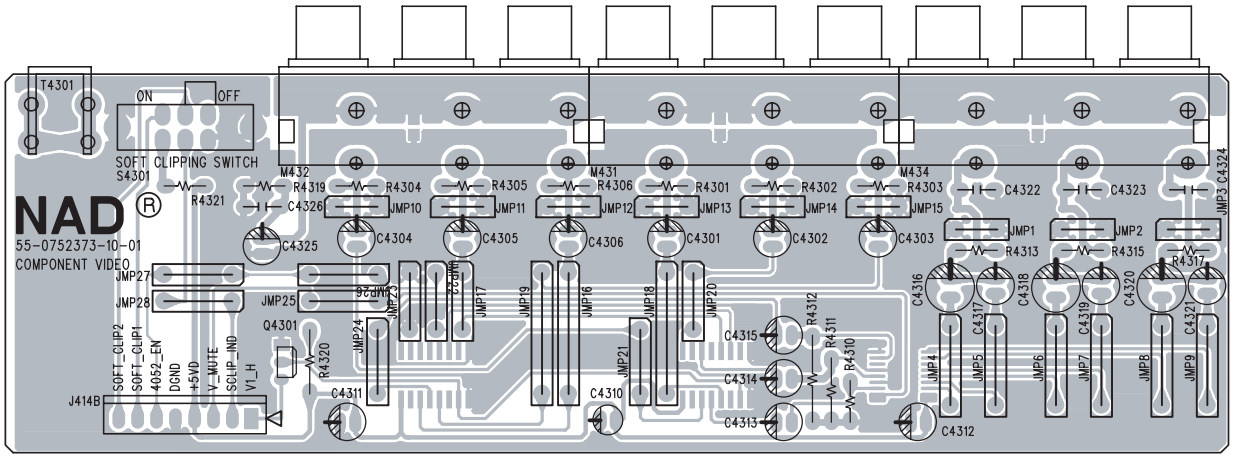
AUDIO BOARD - COMPONENT SIDE



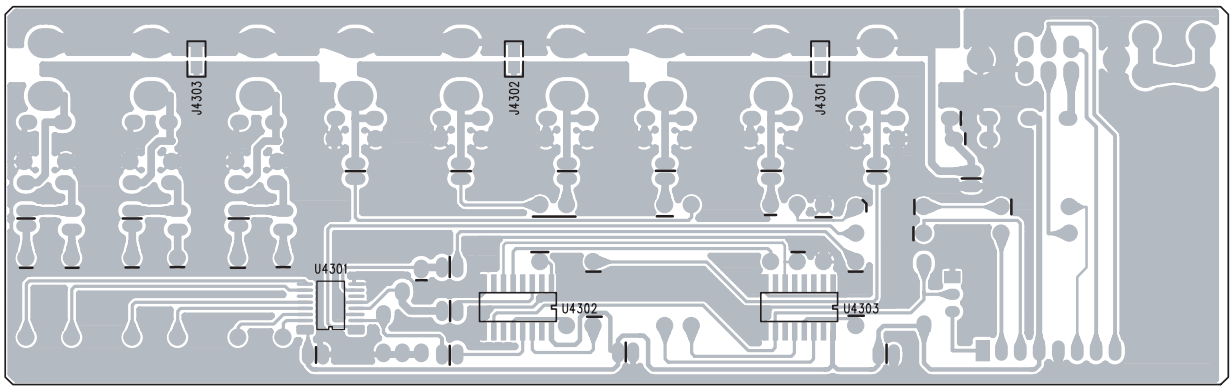
AUDIO BOARD - COPPER SIDE



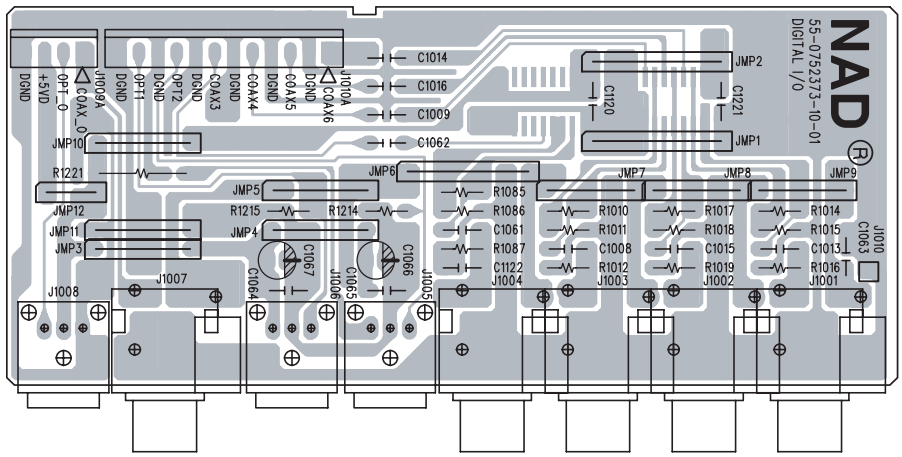
COMPONENT VIDEO BOARD - COMPONENT SIDE



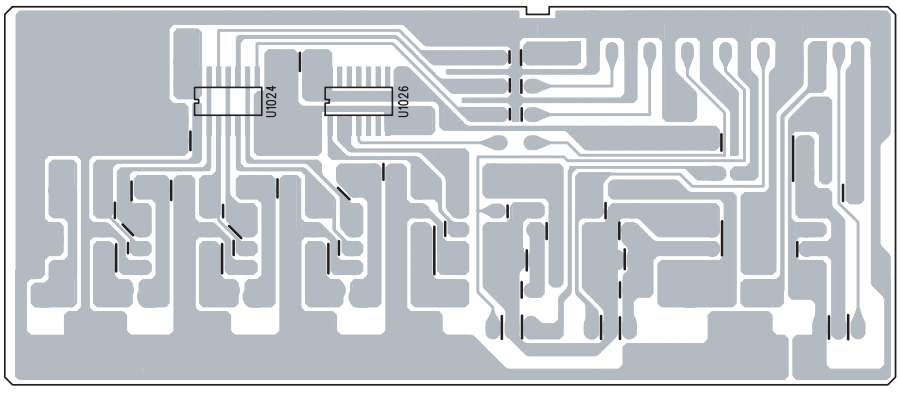
COMPONENT VIDEO BOARD - COPPER SIDE



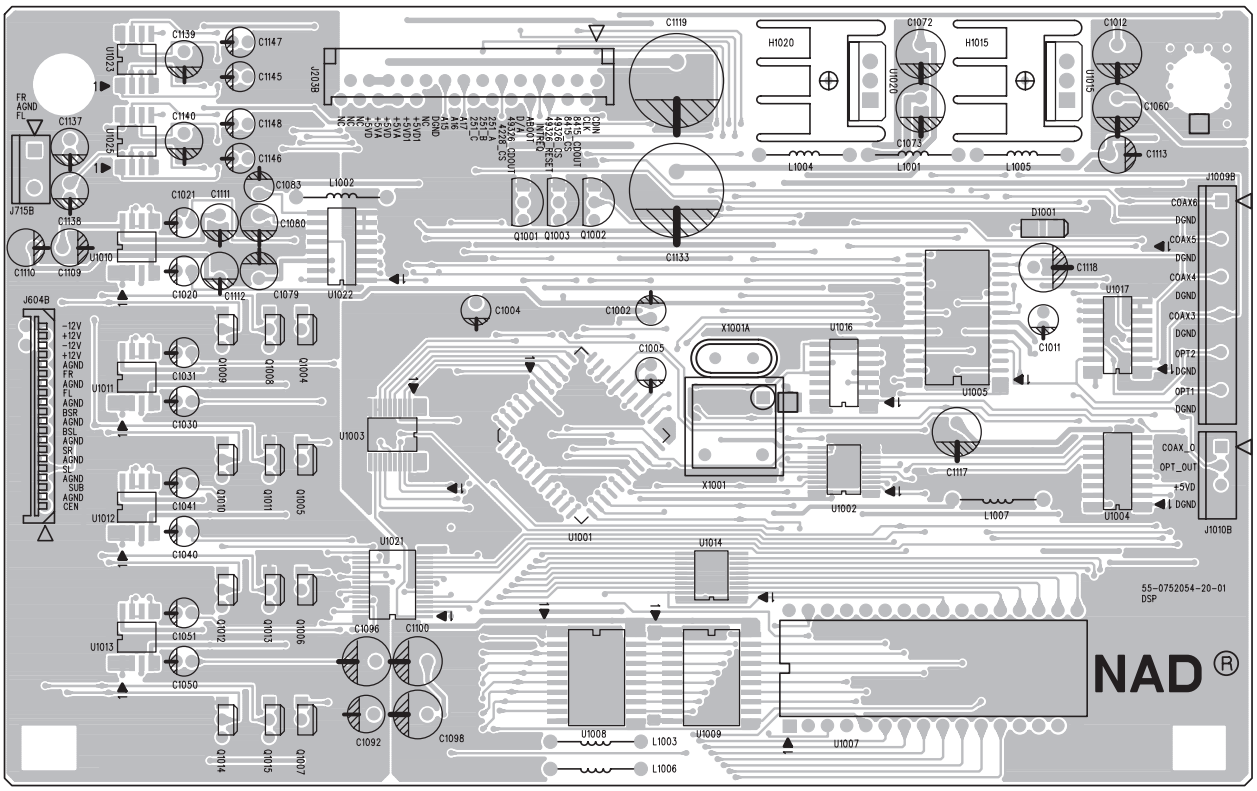
DIGITAL BOARD - COMPONENT SIDE SIDE



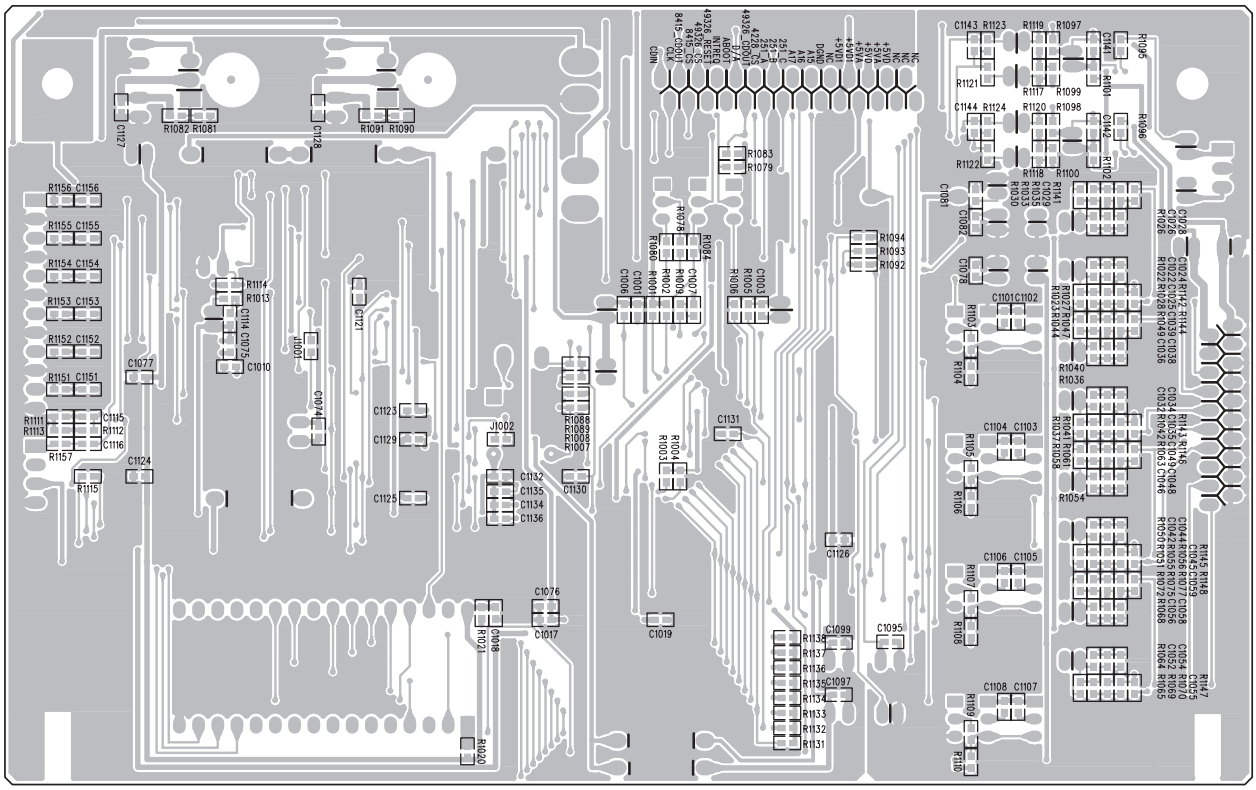
DIGITAL BOARD - COPPER SIDE



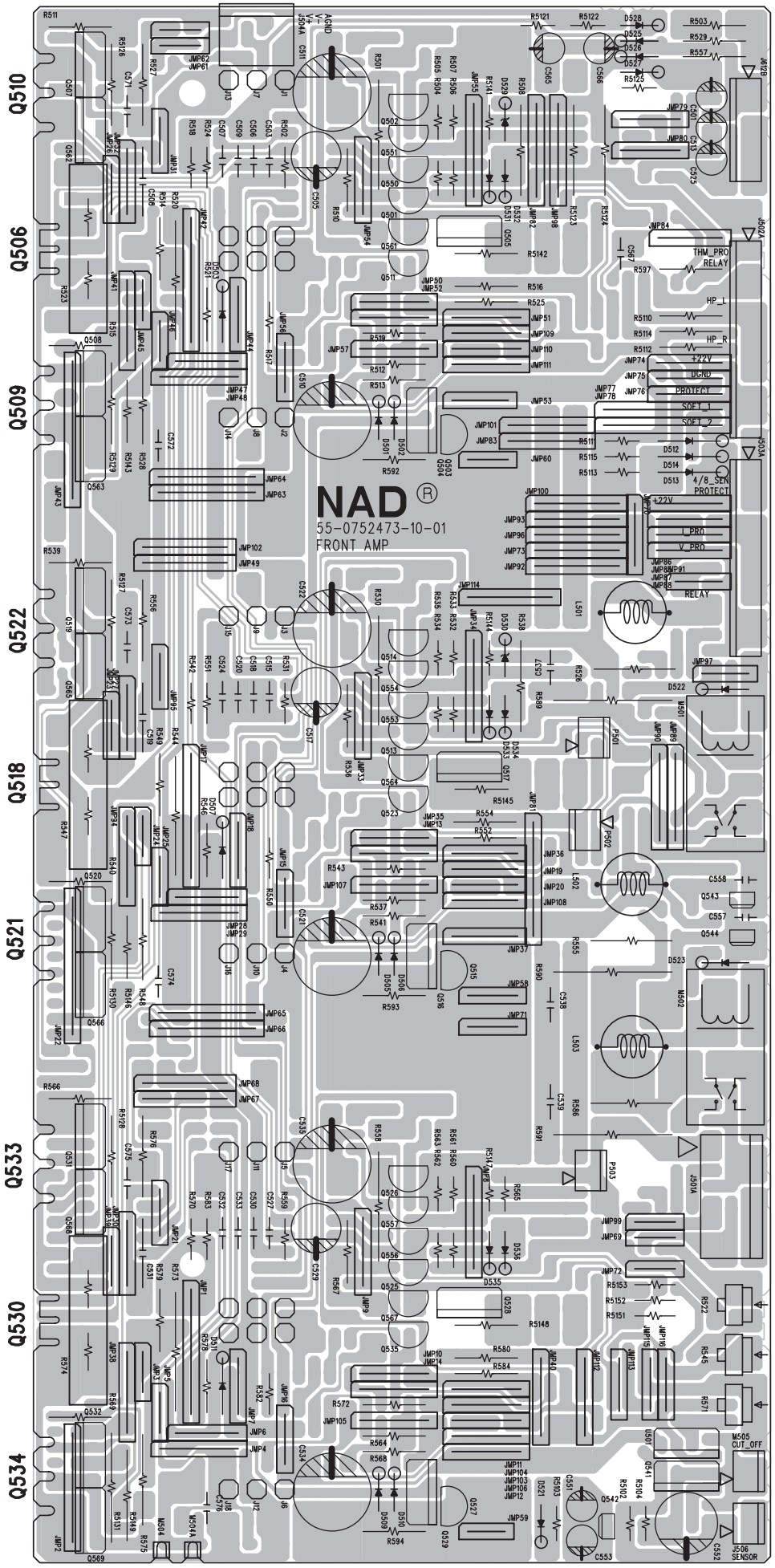
DSP BOARD - COMPONENT SIDE



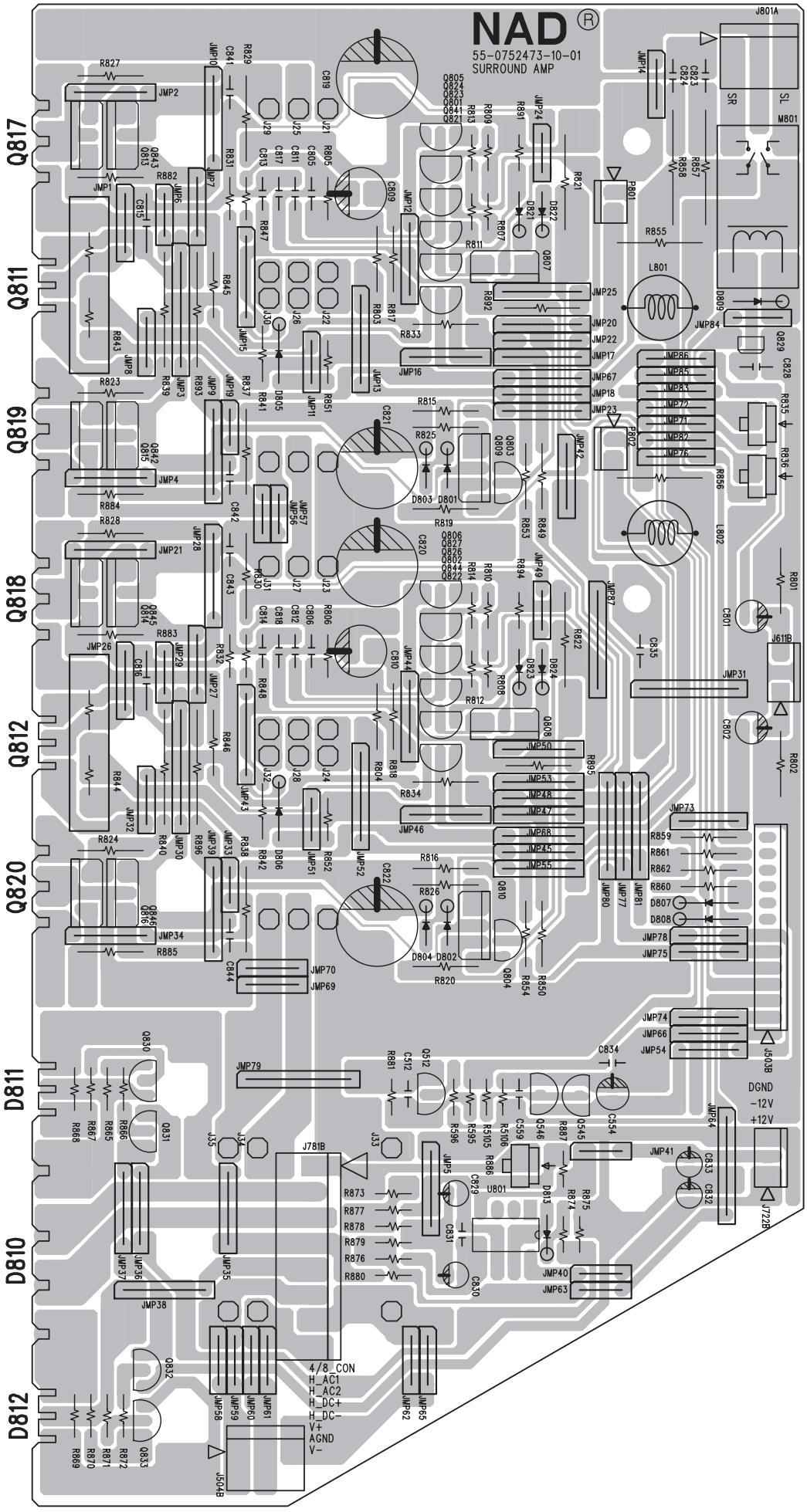
DSP BOARD - COPPER SIDE



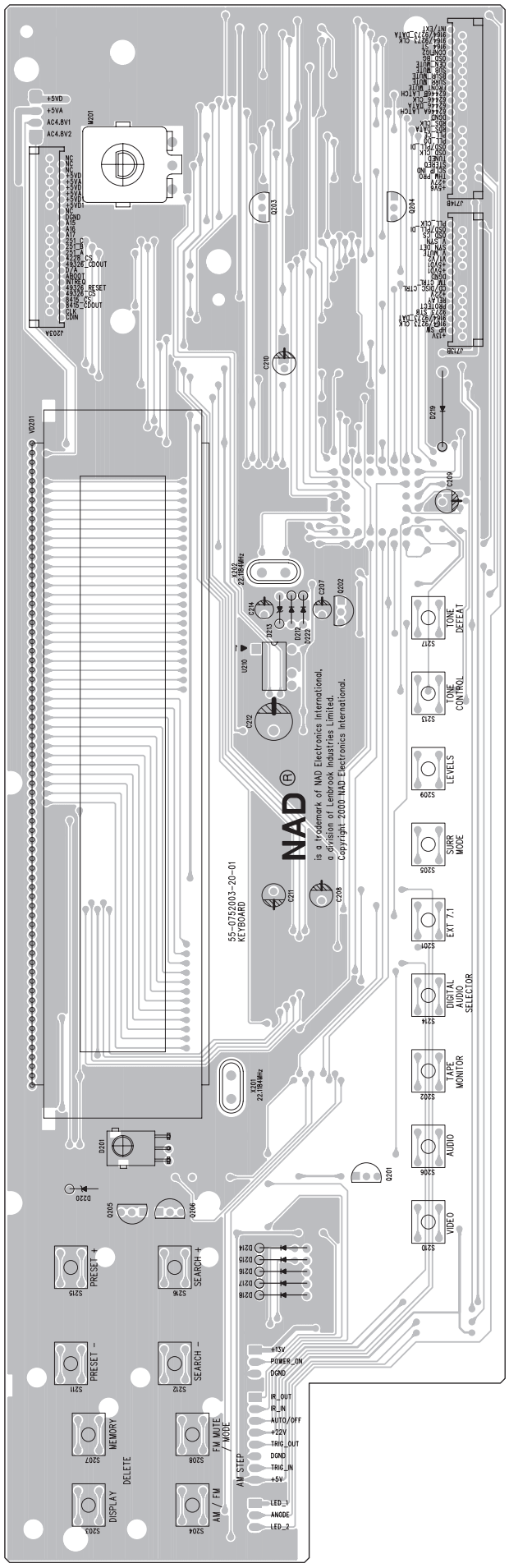
FRONT/CENTER AMPLIFIER BOARD



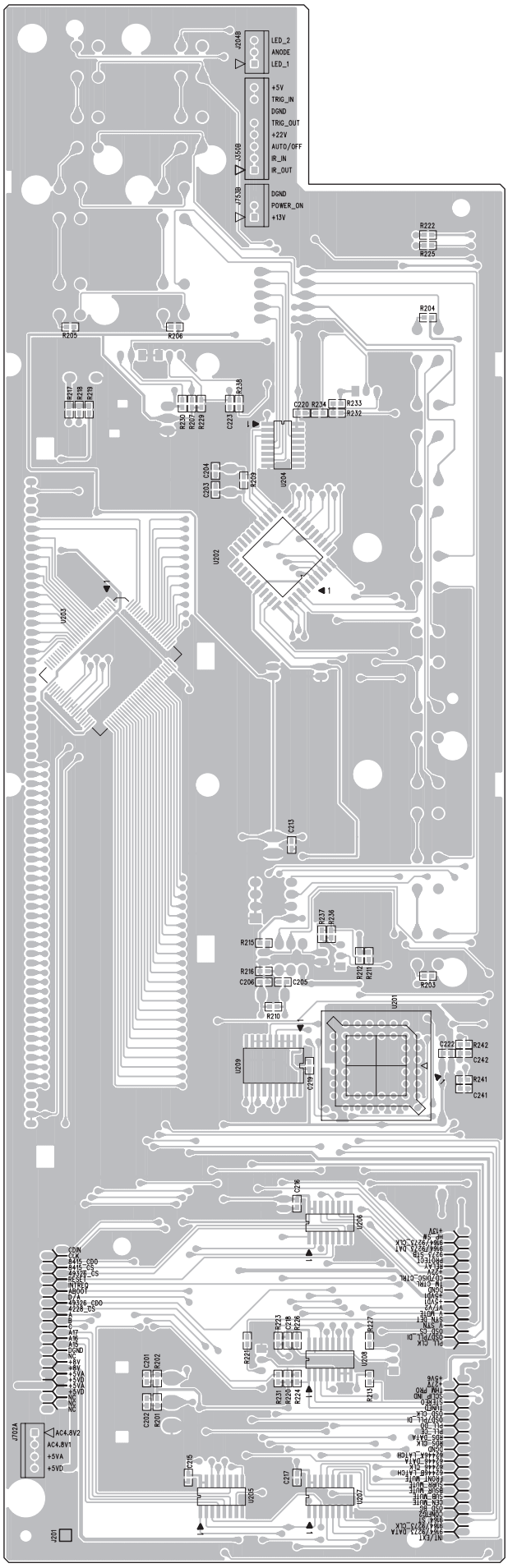
SURROUND AMPLIFIER BOARD



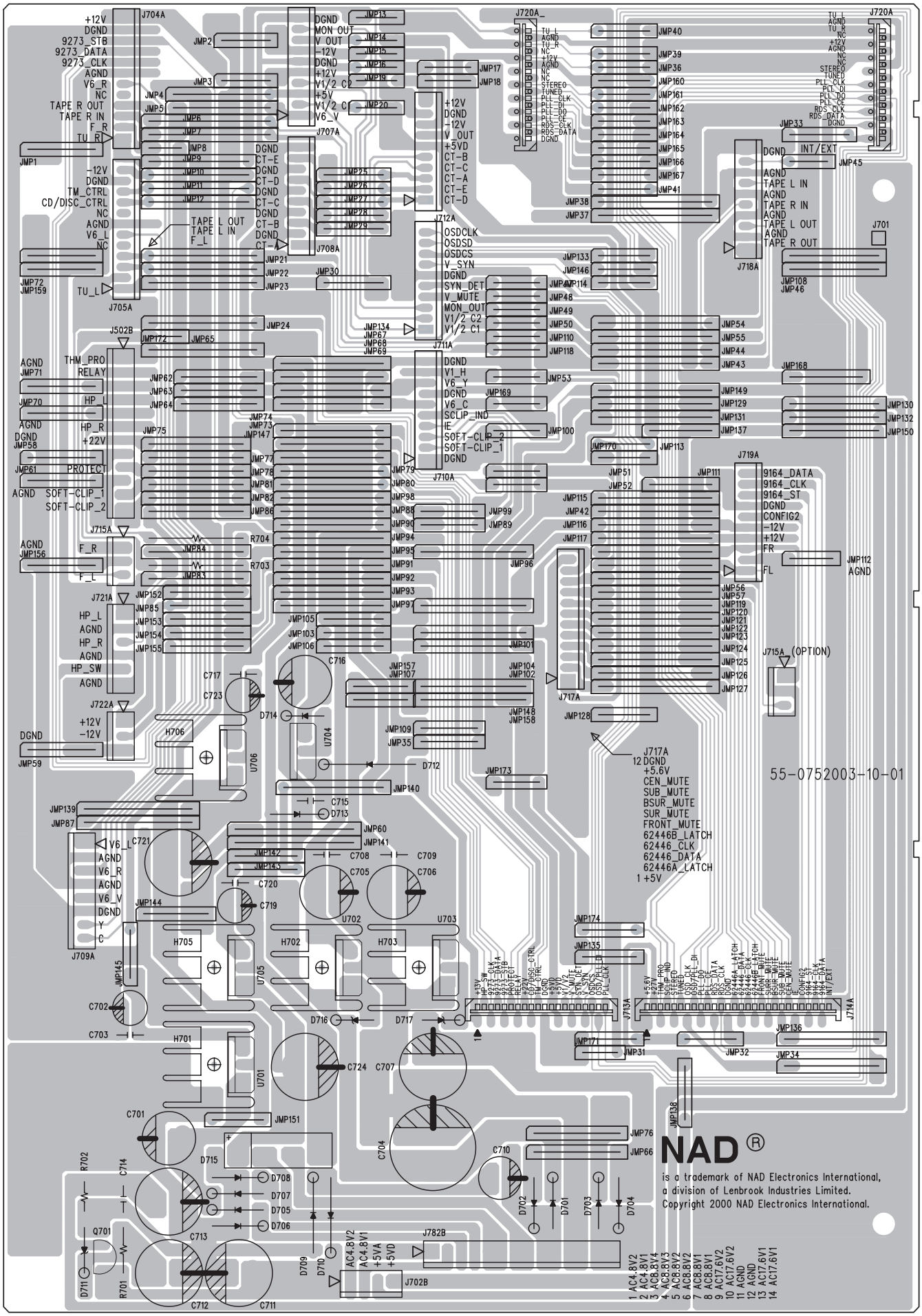
KEY BOARD - COMPONENT SIDE



KEY BOARD - COPPER SIDE



MAIN BOARD


55-0752003-10-01
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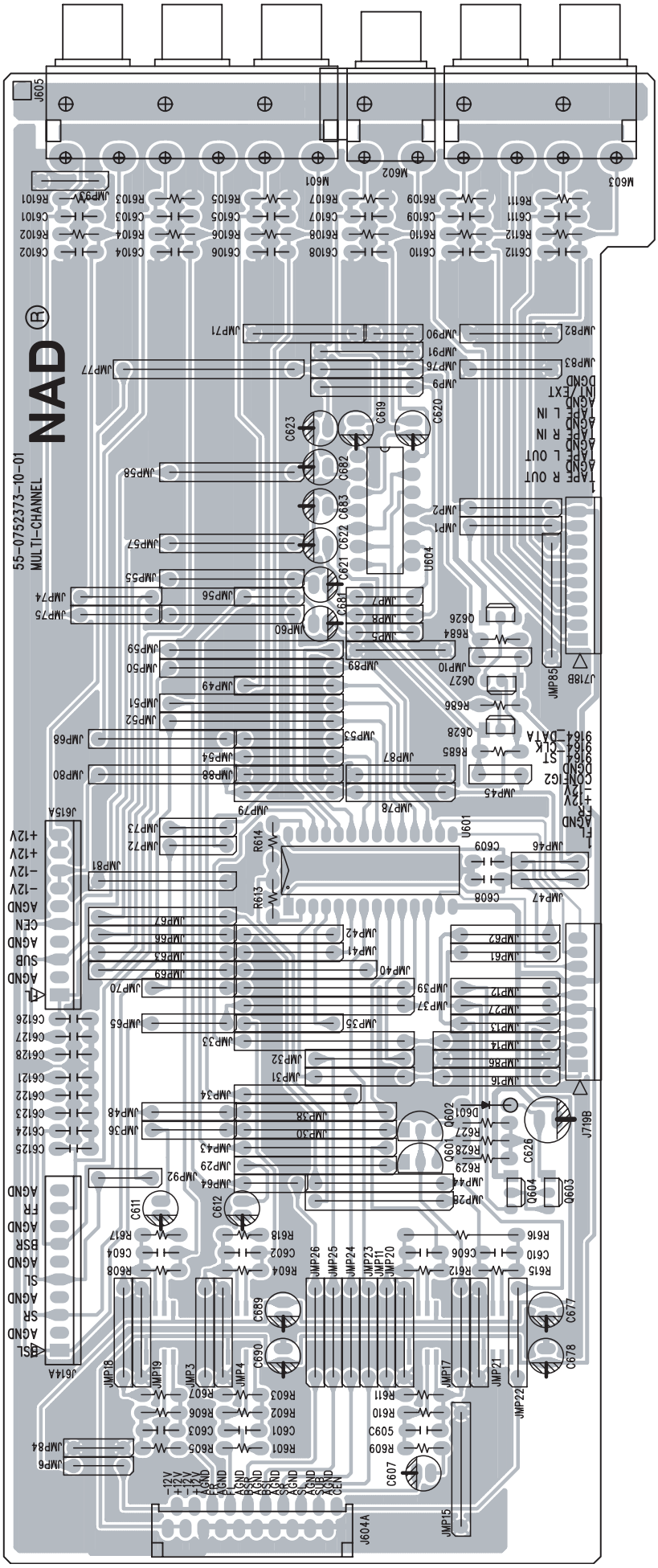
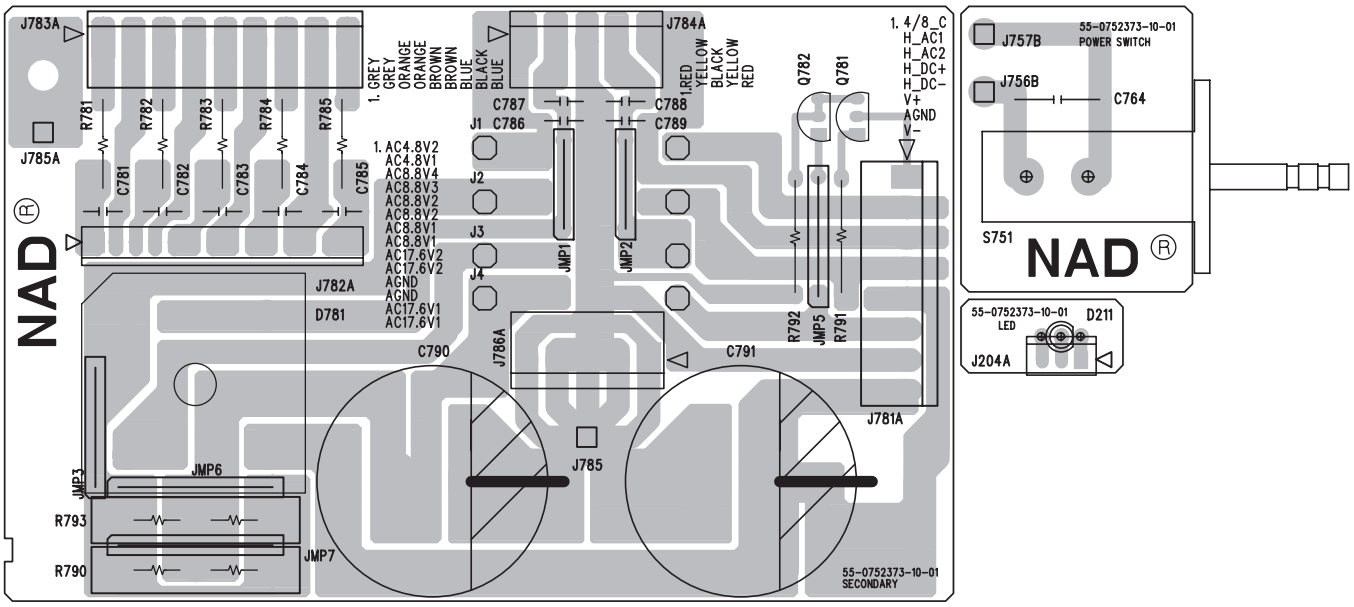
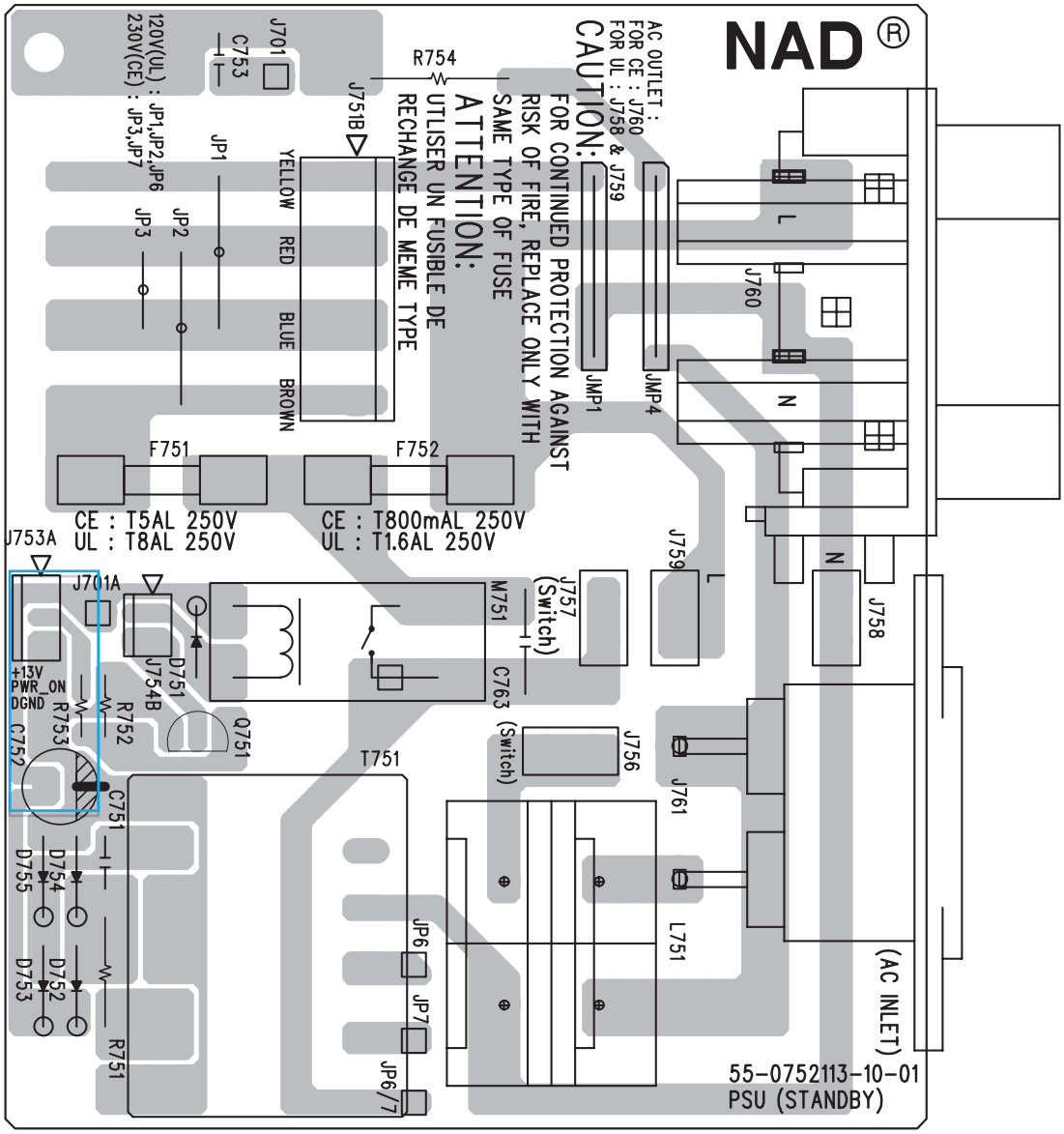
MULTI-CHANNEL BOARD



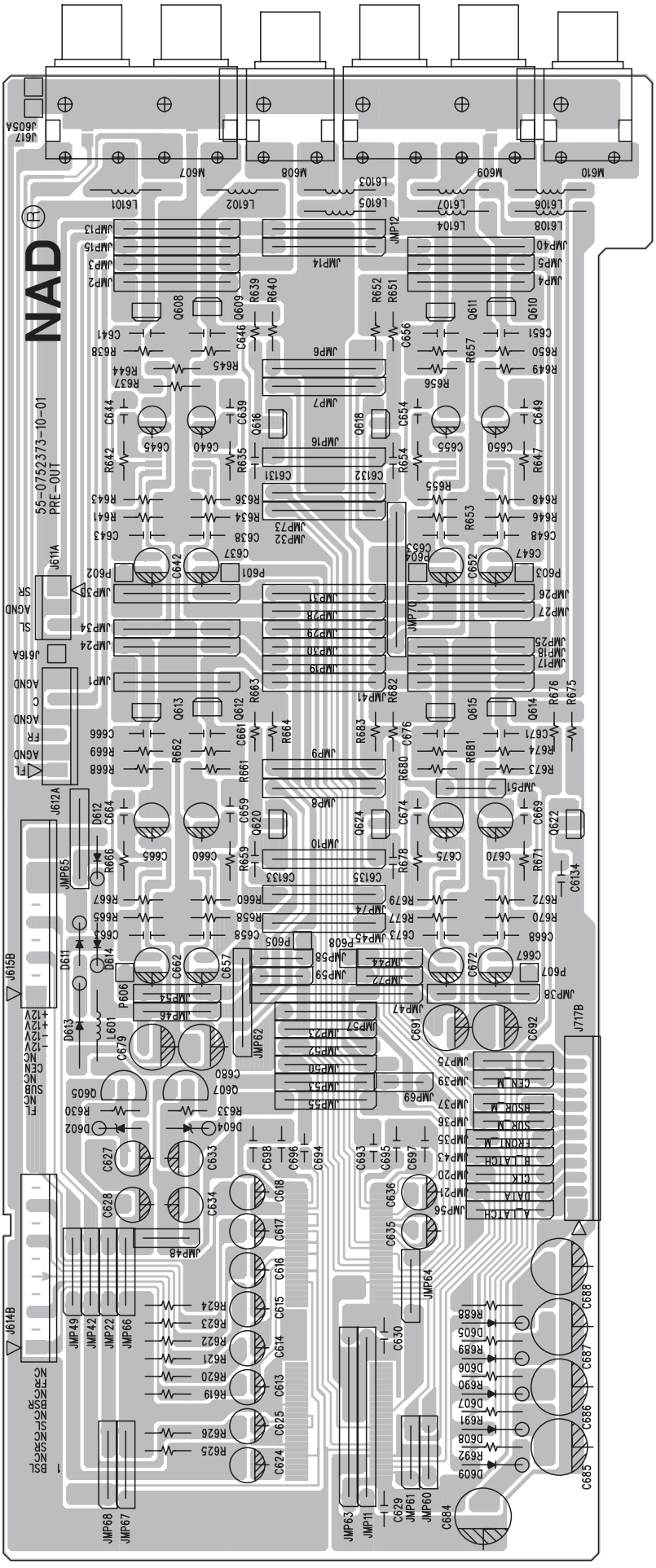
SECONDARY/POWER SWITCH/LED BOARD



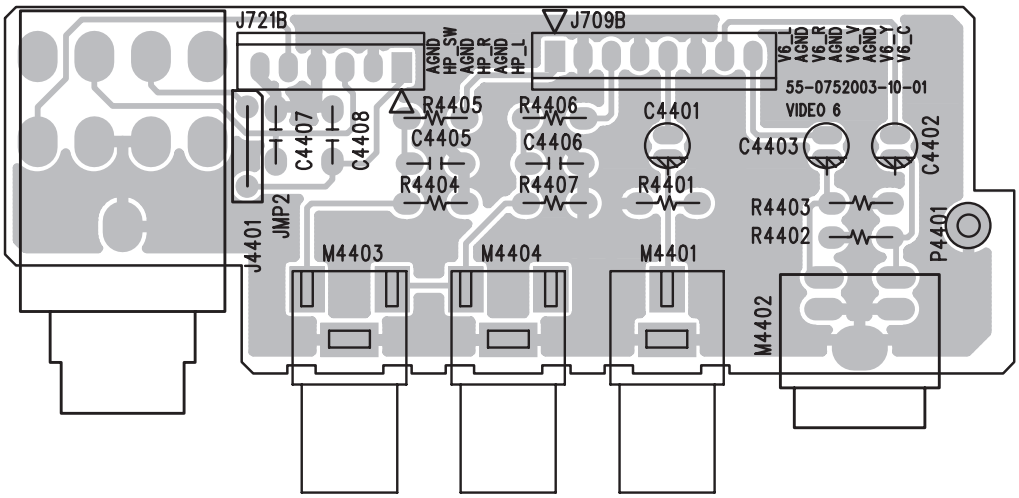
POWER SUPPLY BOARD (STANDBY)



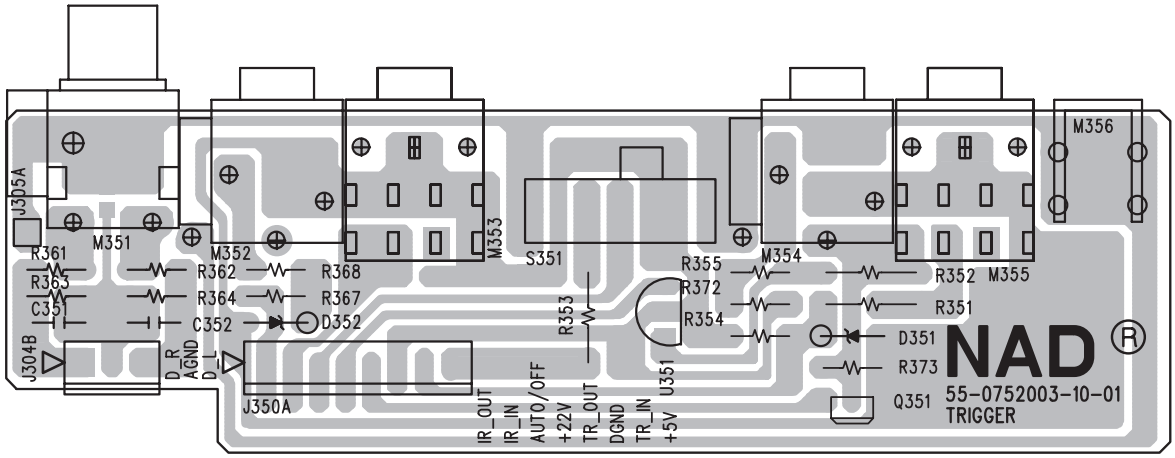
PRE-OUT BOARD



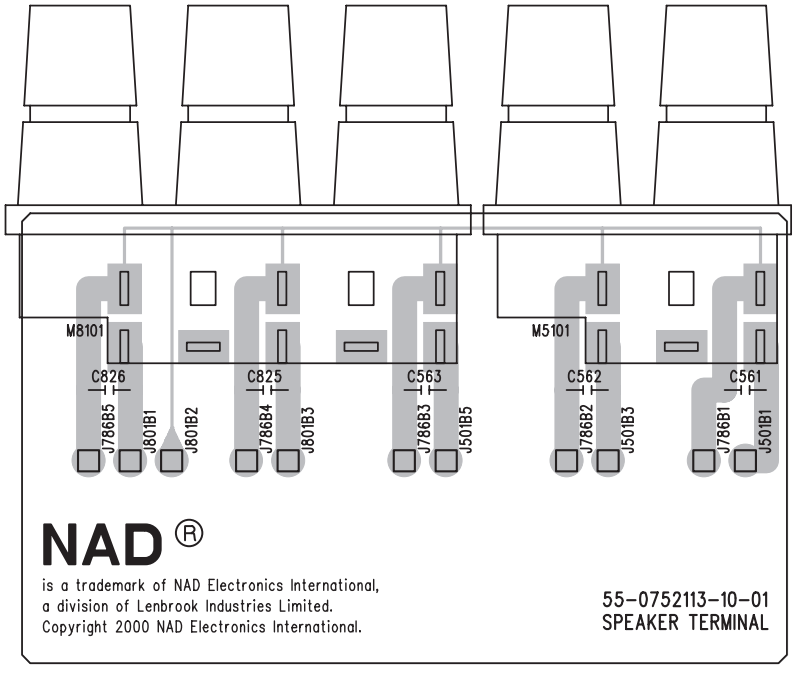
VIDEO 6 BOARD



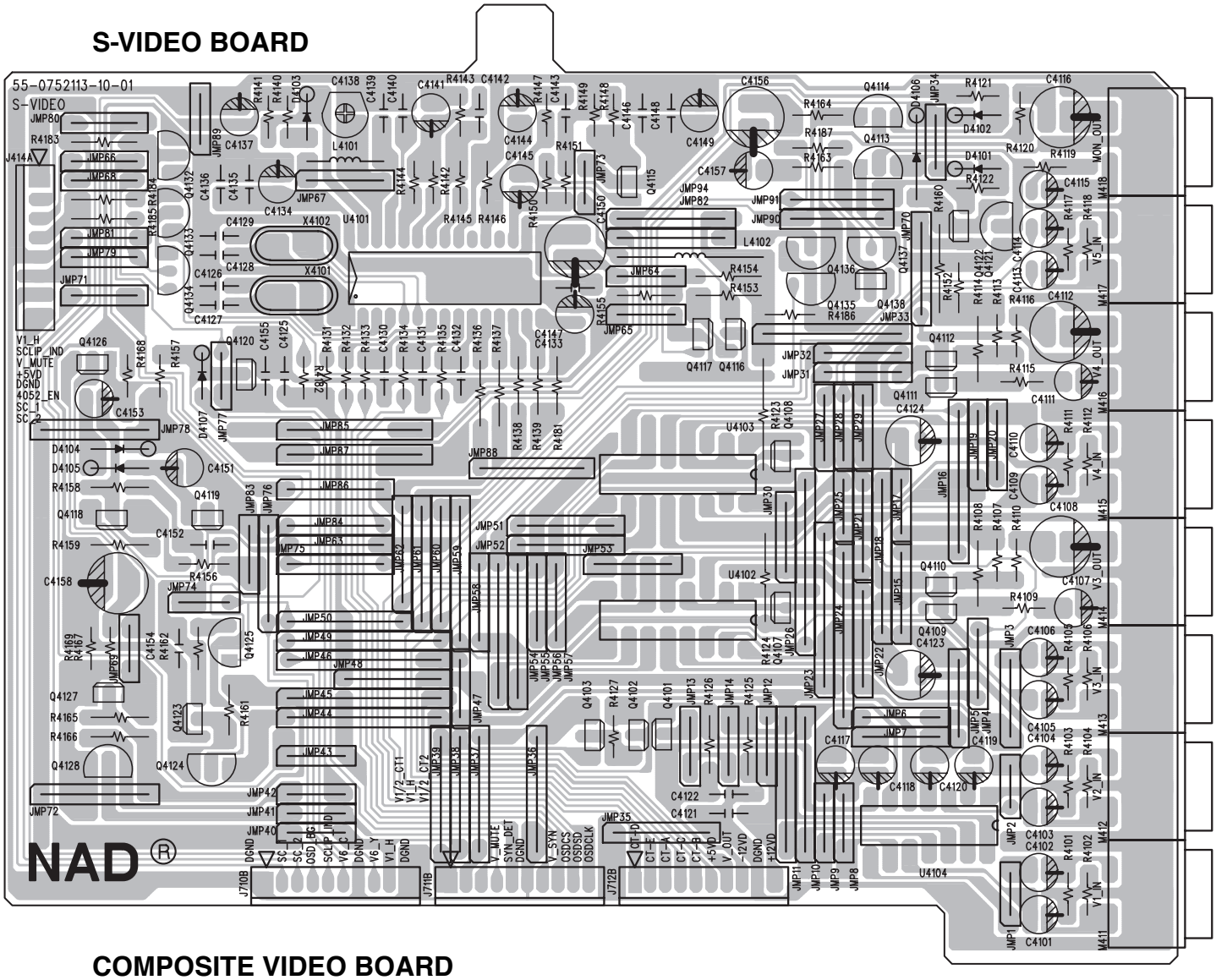
TRIGGER BOARD



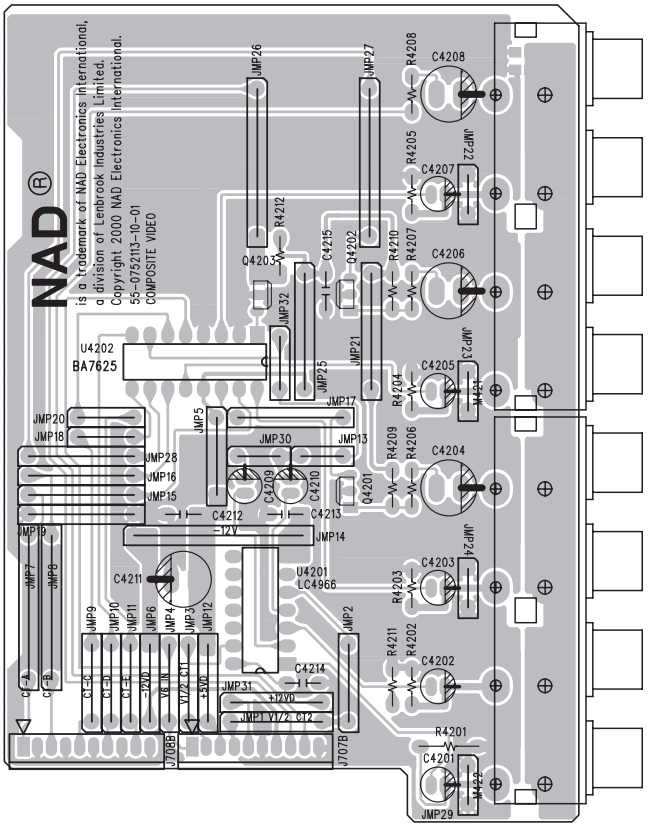
SPEAKER TERMINAL BOARD



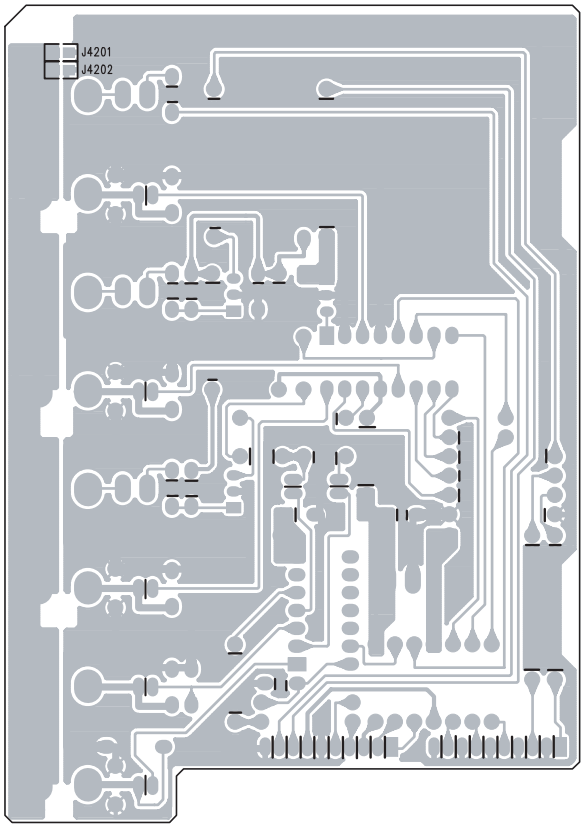
S-VIDEO BOARD



COMPOSITE VIDEO BOARD
- COMPONENT SIDE

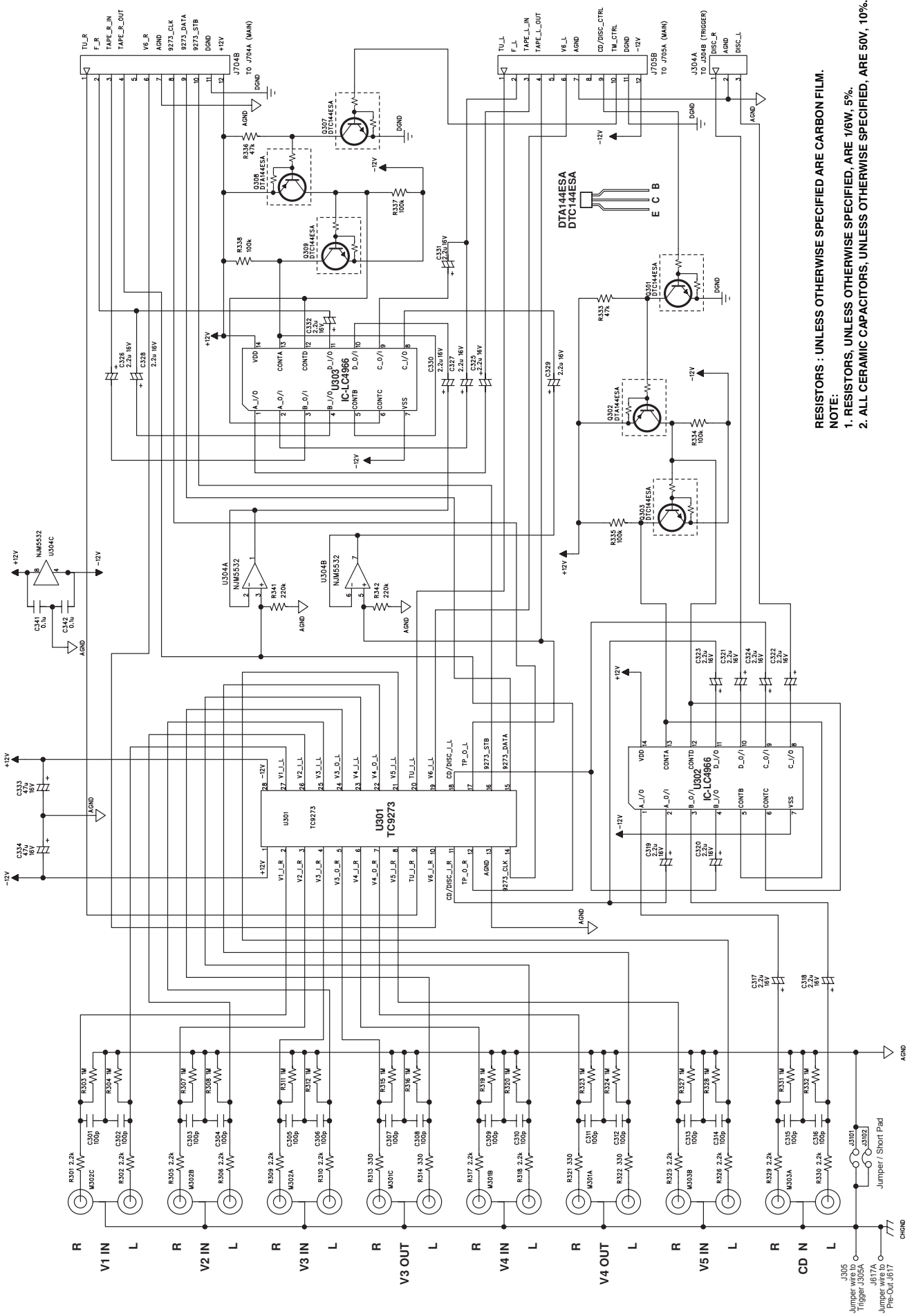


- COPPER SIDE



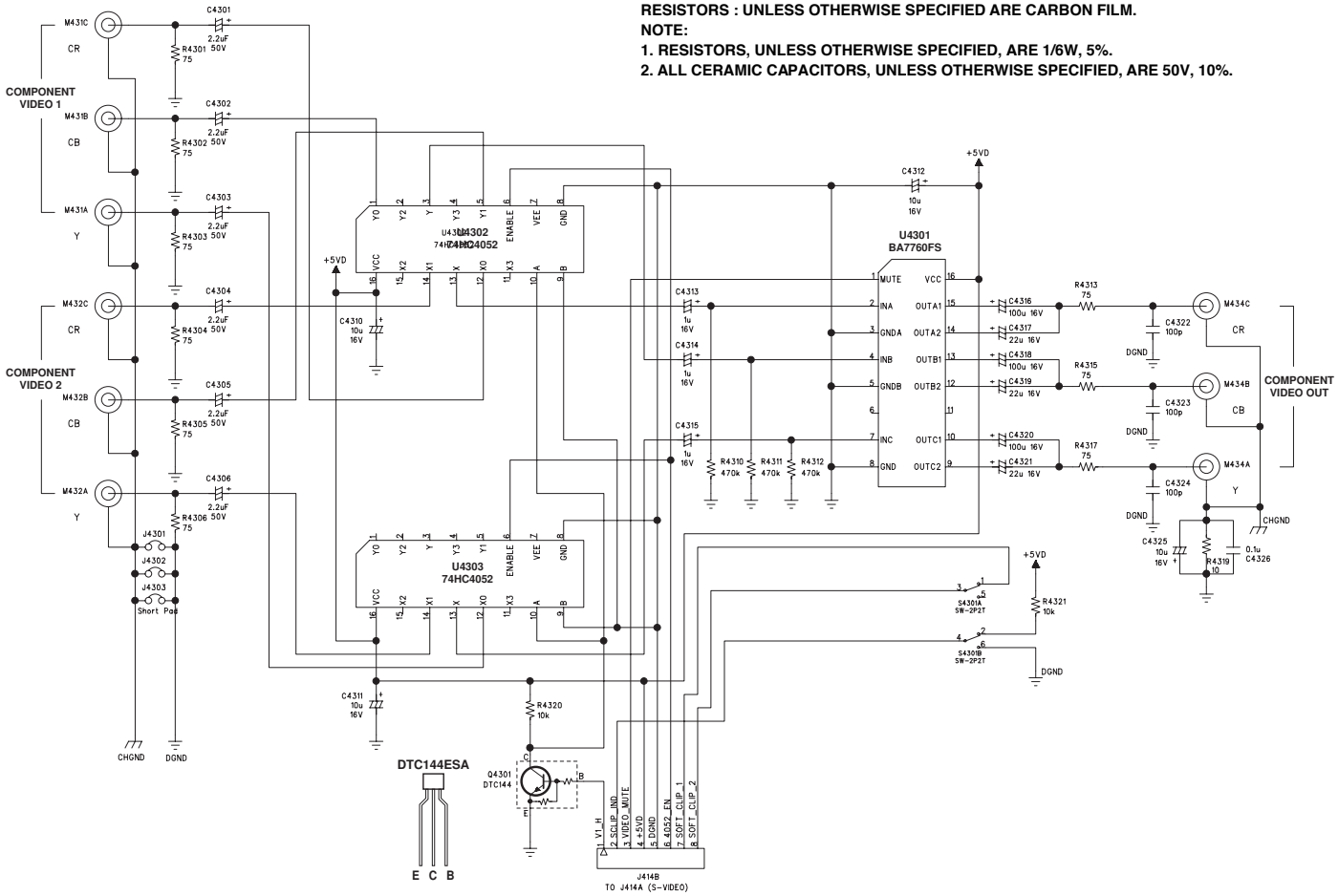
SCHEMATIC DIAGRAM

AUDIO SWITCH



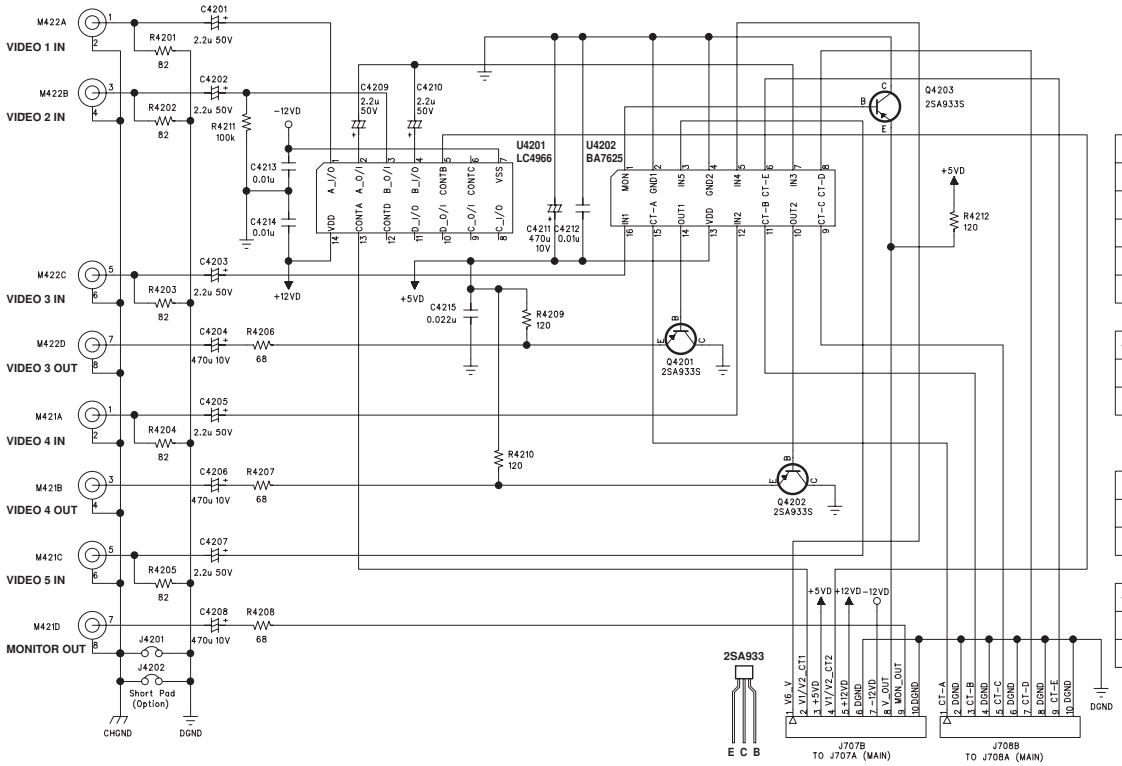
COMPONENT VIDEO

RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.



COMPOSITE VIDEO

RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.



BA7625

VIDEO IN	PIN NAME	PIN	REMARK
V1/V2	IN3	7	FROM LC4966
V3 IN	IN1	16	
V4 IN	IN2	12	
V5 IN	IN5	3	
V6 IN	IN4	5	FROM VIDEO 6 BOARD

BA7625

VIDEO OUT	PIN NAME	PIN
V3 OUT	OUT1	14
V4 OUT	OUT2	10

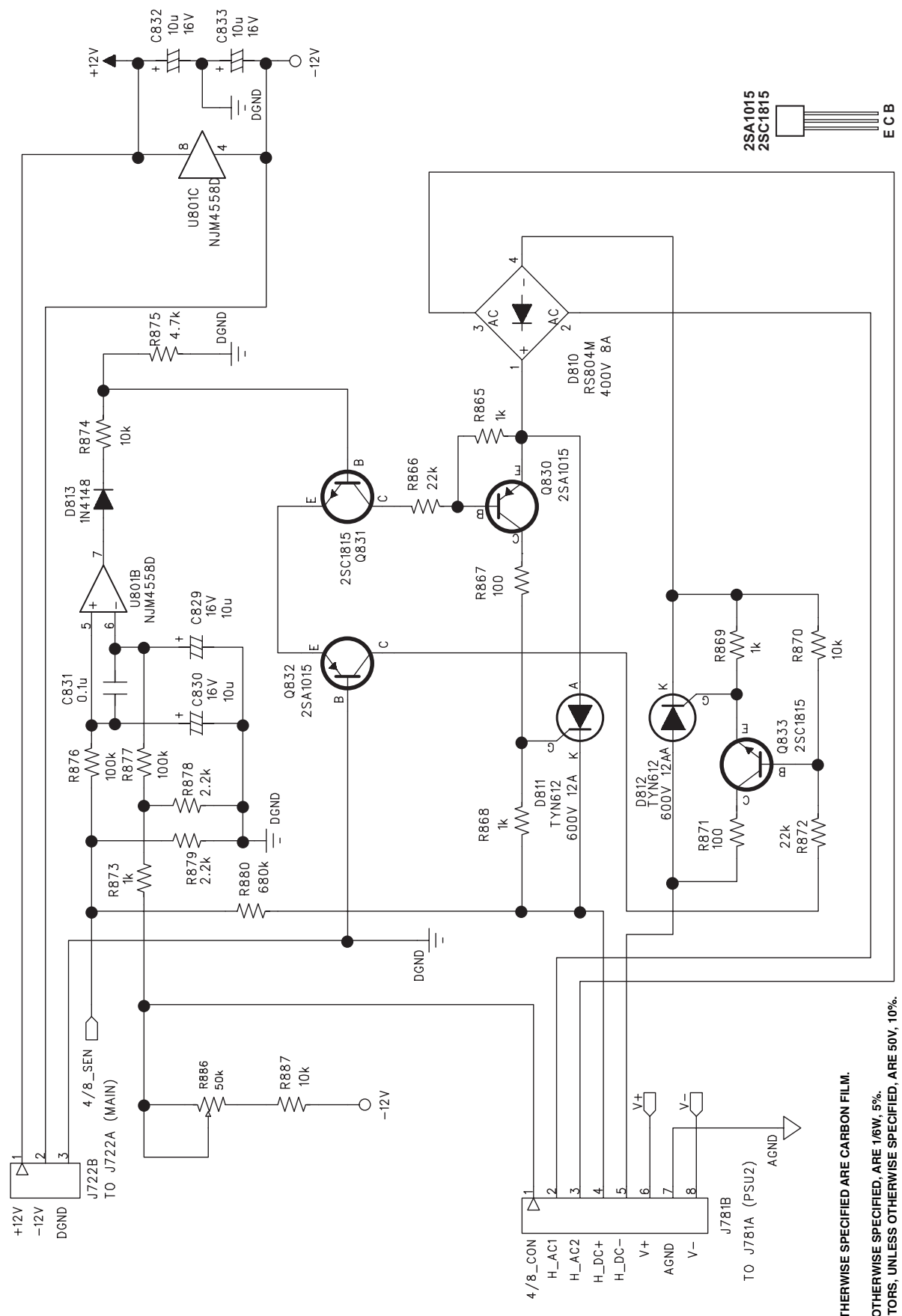
LC4966

VIDEO IN	PIN NAME	PIN
V1	A_I/O	1
V2	B_O/I	3

LC4966

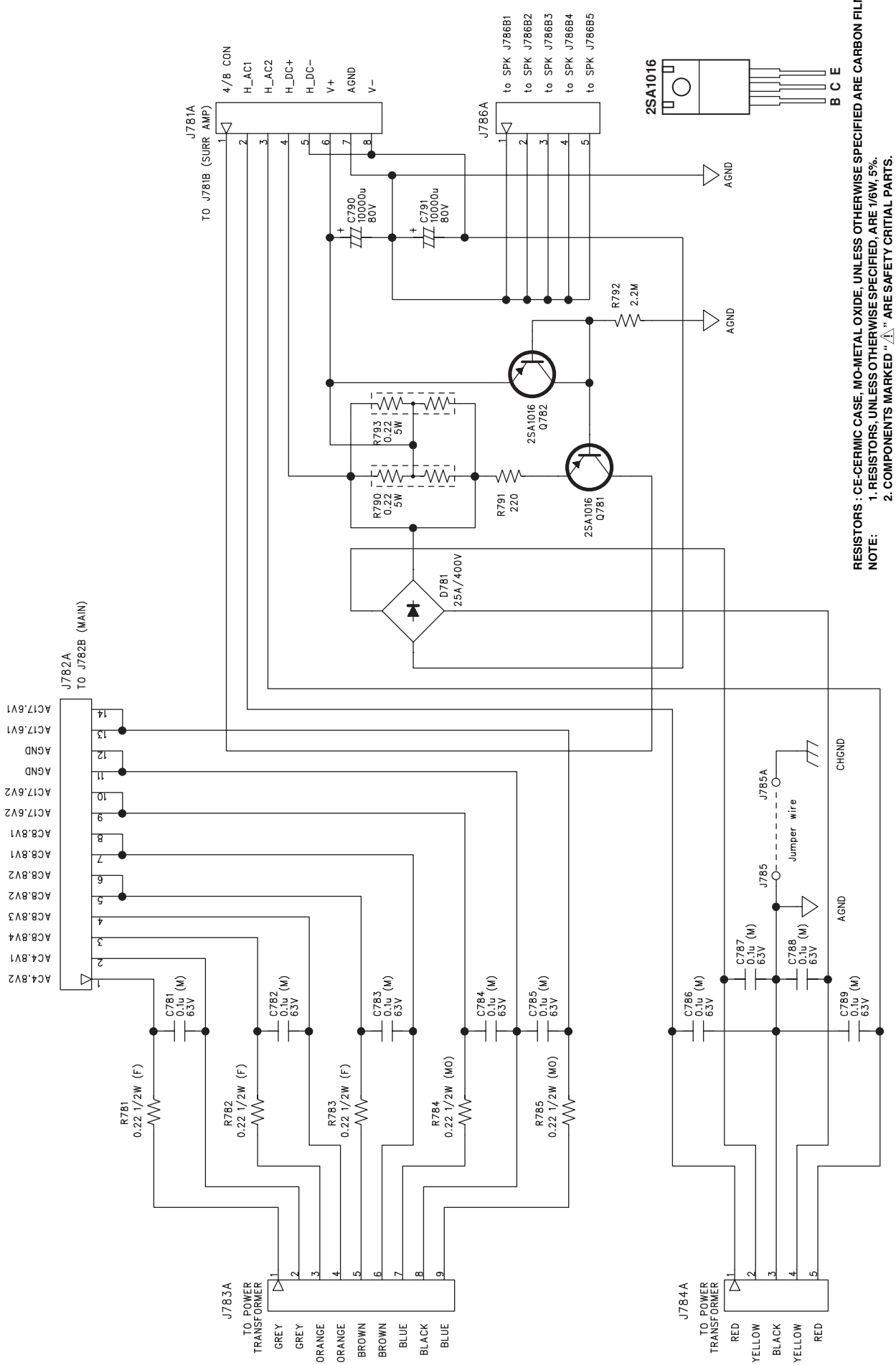
VIDEO OUT	PIN NAME	PIN
V1/V2	A_O/I	2
V1/V2	B_I/O	4

ISC



RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

POWER SUPPLY (SECONDARY)

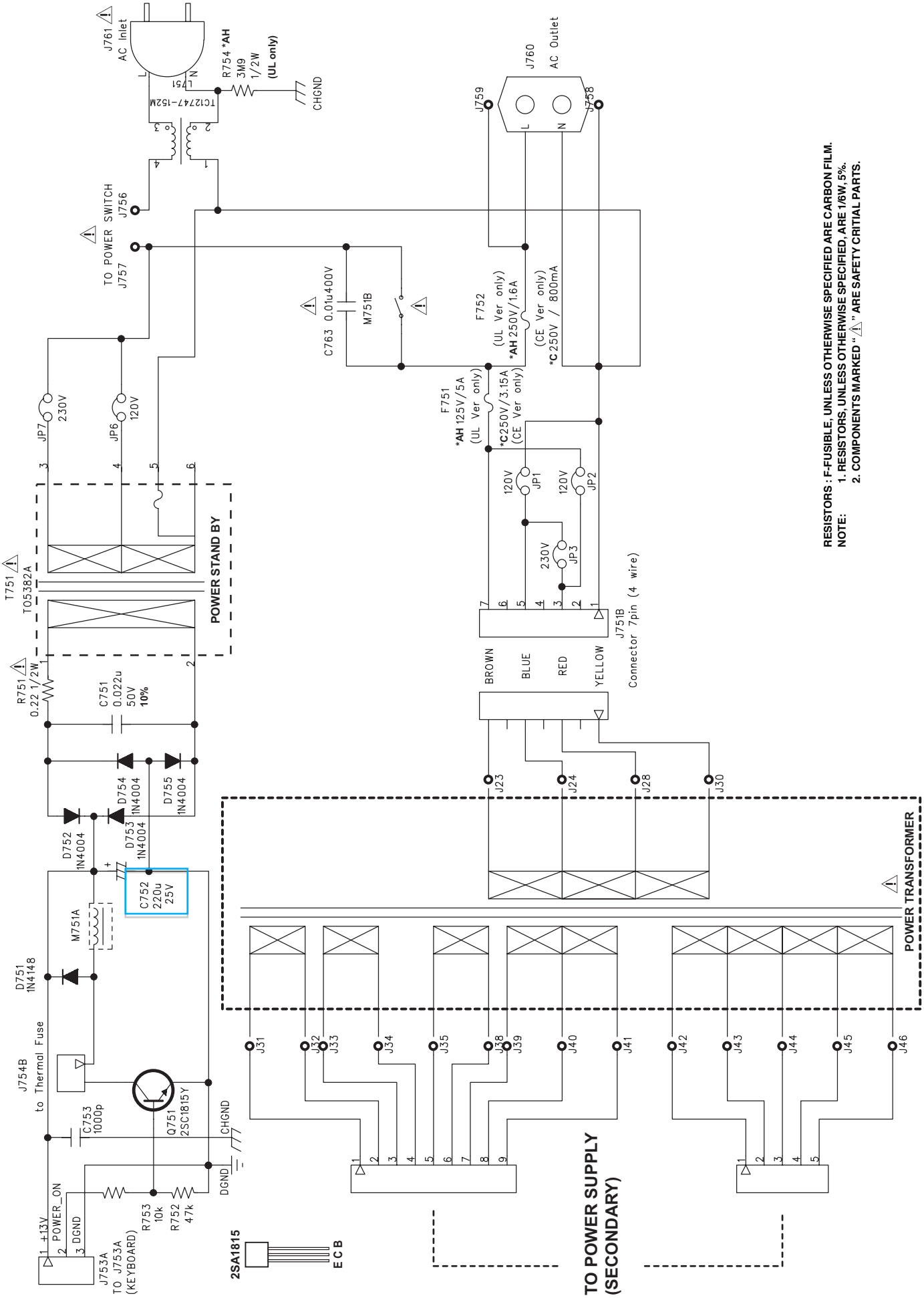


RESISTORS : CE-CERMIC CASE, MO-METAL OXIDE, UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.

NOTE: 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.

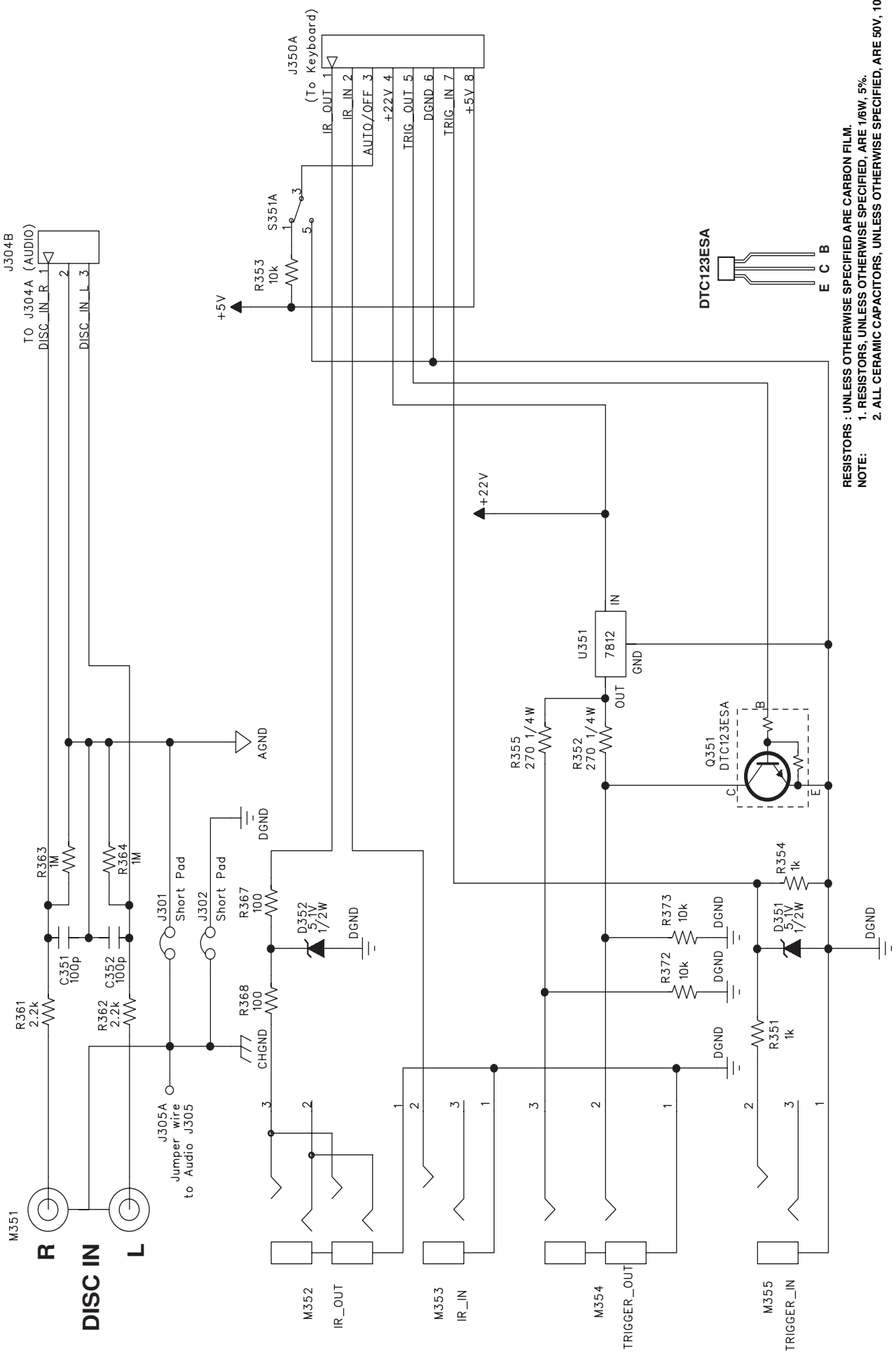
2. COMPONENTS MARKED "⚠" ARE SAFETY CRITIAL PARTS.

POWER SUPPLY (STAND BY)

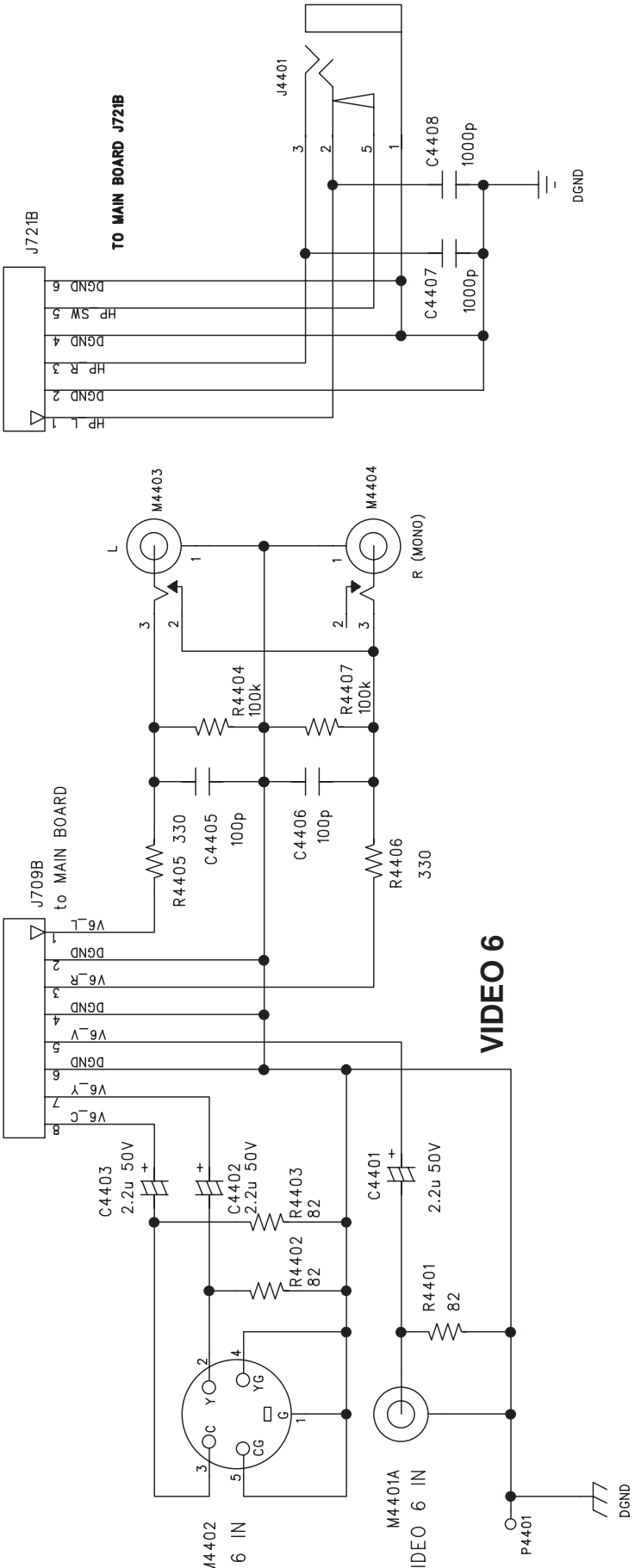


RESISTORS : F-FUSIBLE, UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE: 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. COMPONENTS MARKED "⚠" ARE SAFETY CRITIAL PARTS.

TRIGGER

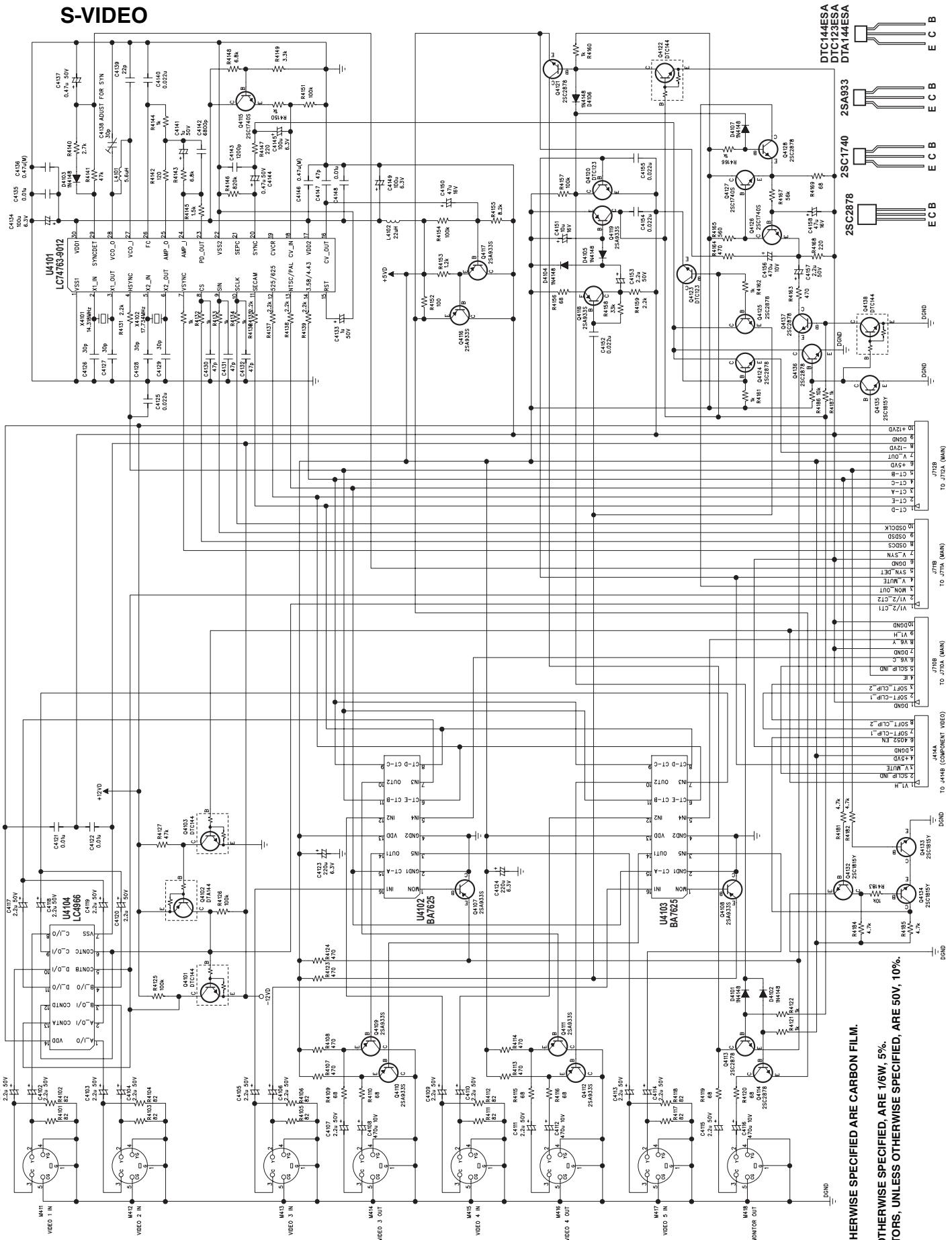

J304B
TO J304A (AUDIO)
DISC_IN_R 1
2
DISC_IN_L 3
J350A
(To Keyboard)
IR_OUT 1
IR_IN 2
AUTO/OFF 3
+22V 4
TRIG_OUT 5
DGND 6
TRIG_IN 7
+5V 8
S351A
R353
10k
+5V
DTC123ESA
E C B
RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE: 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.
+22V
U351
7812
IN
GND
OUT
R355
270 1/4W
R352
270 1/4W
Q351
DTC123ESA
R363
1M
R364
1M
C351
100p
C352
100p
R361
2.2k
R362
2.2k
J301
Short Pad
J302
Short Pad
AGND
DGND
R367
100
R368
100
CHGND
D352
5.1V
1/2W
R373
10k
R372
10k
R354
1k
D351
5.1V
1/2W
R351
1k
J305A
Jumper wire
to Audio J305
M351
R
DISC IN
L
M352
IR_OUT
M353
IR_IN
M354
TRIGGER_OUT
M355
TRIGGER_IN

VIDEO 6



RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

S-VIDEO



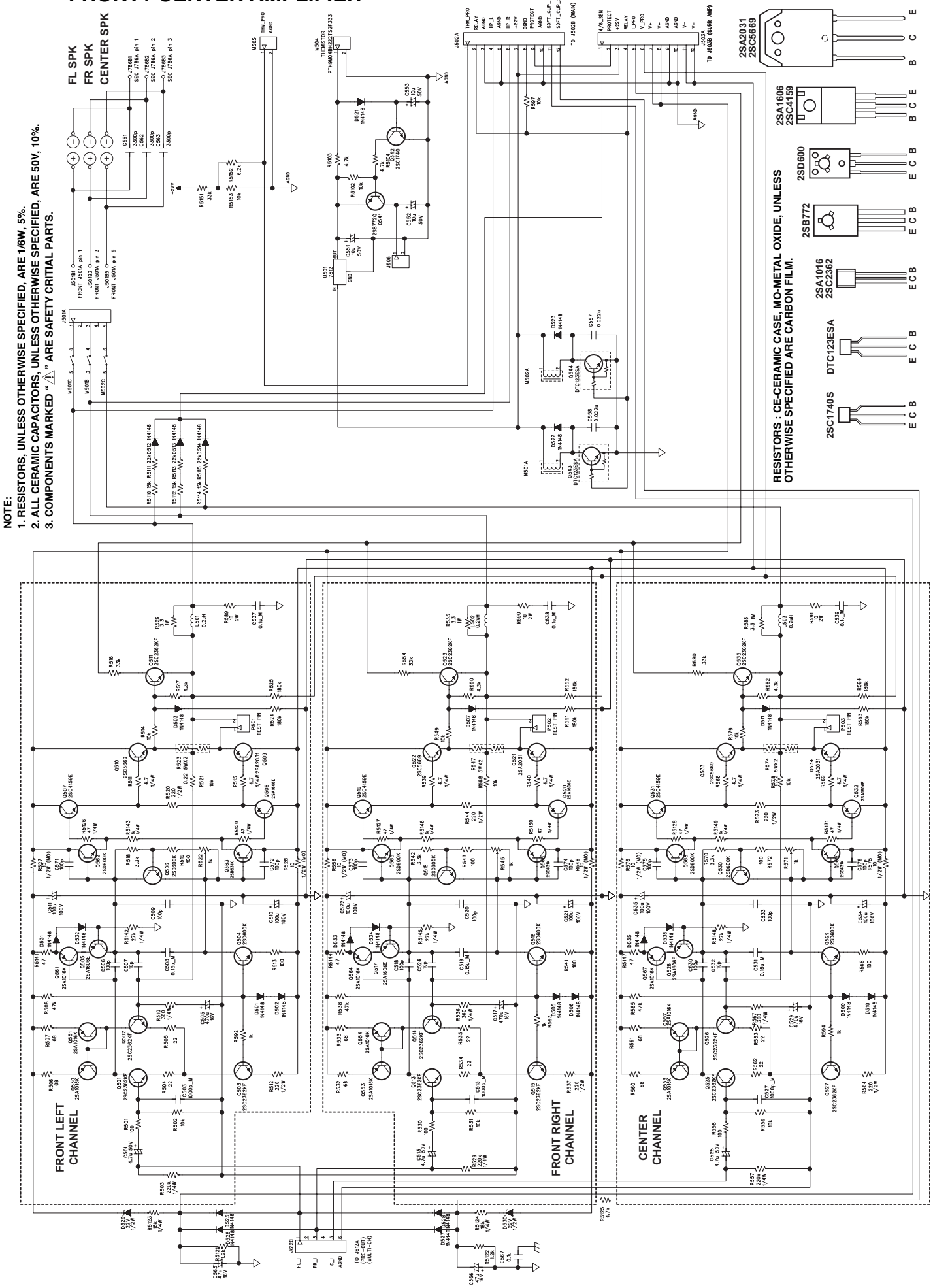
RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.

NOTE:

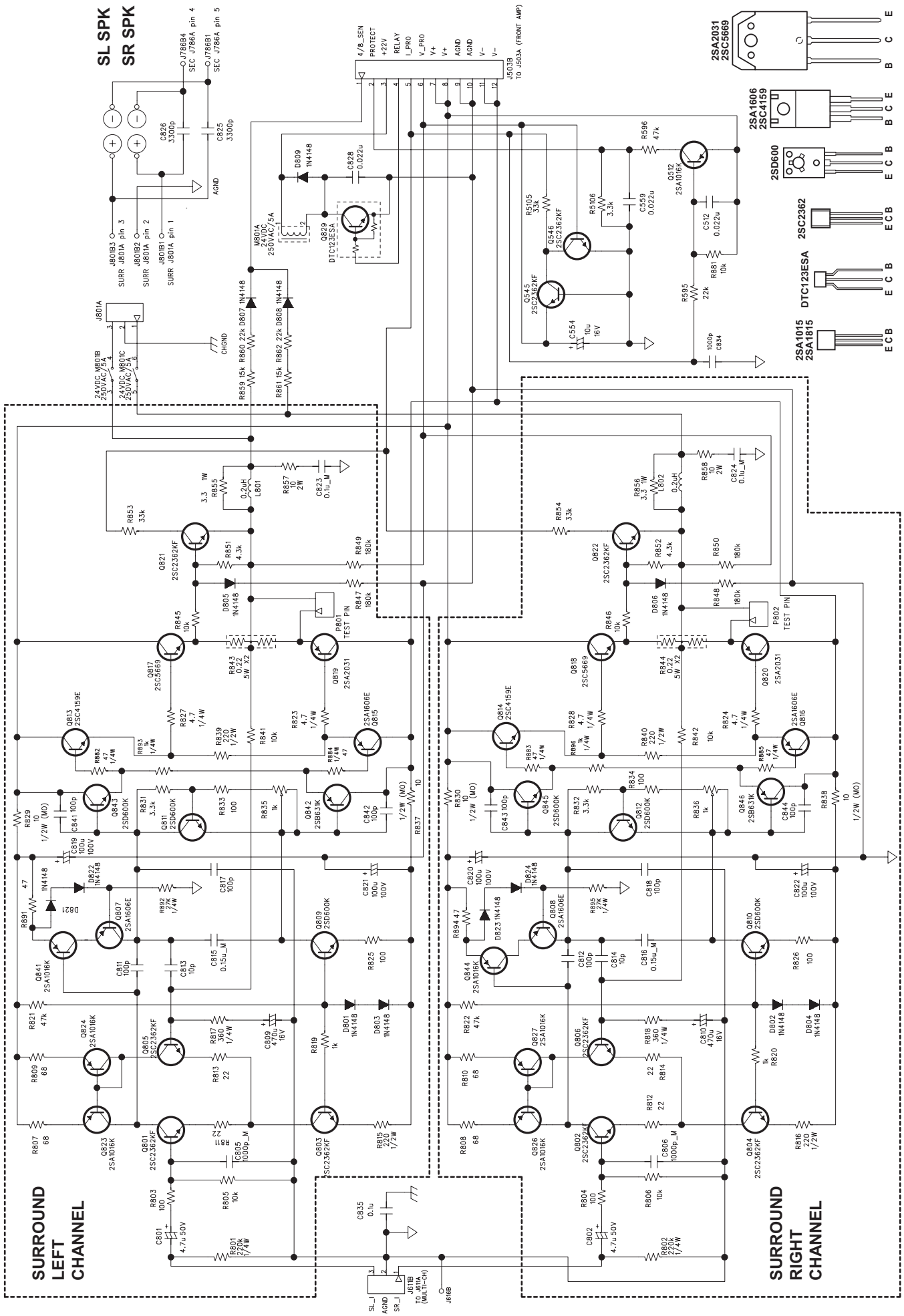
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.

2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

FRONT / CENTER AMPLIFIER



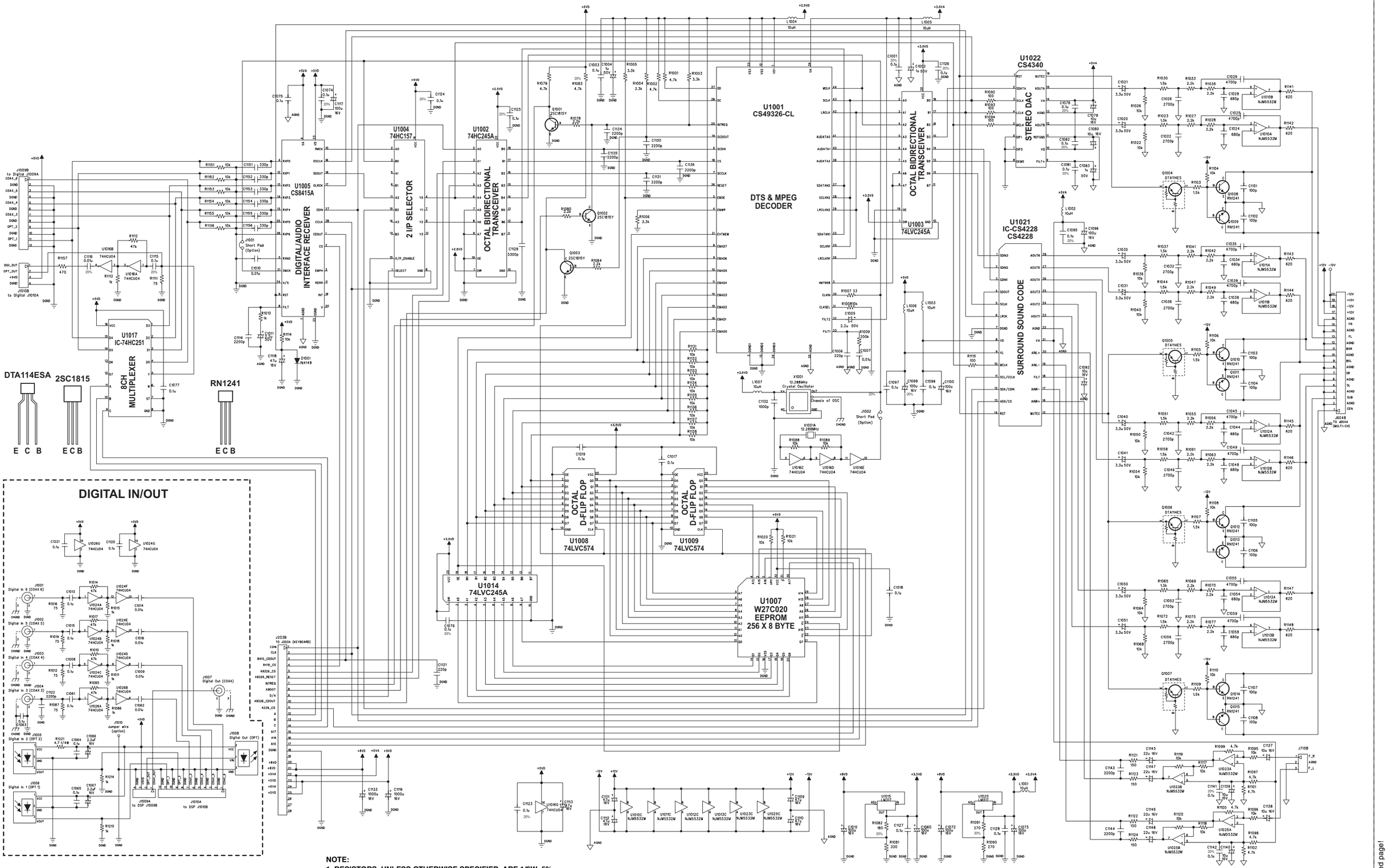
SURROUND AMPLIFIER



NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.
3. COMPONENTS MARKED " ⚠ " ARE SAFETY CRITIAL PARTS.

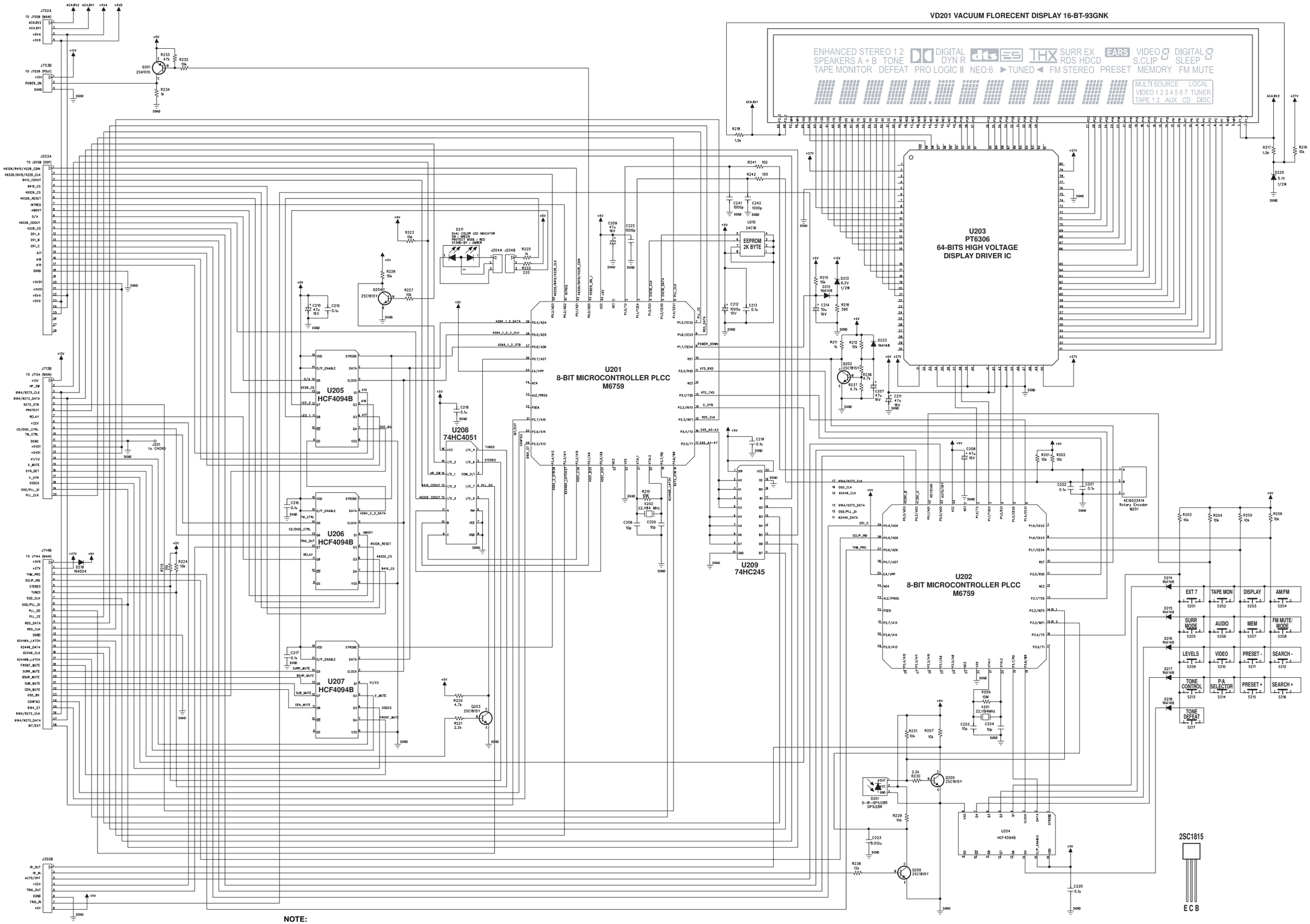
RESISTORS : CE-CERAMIC CASE, MO-METAL OXIDE, UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.

DSP, DIGITAL IN/OUT



Cutting line for folded page!

KEYBOARD



NOTE:

1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.

2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 5%.

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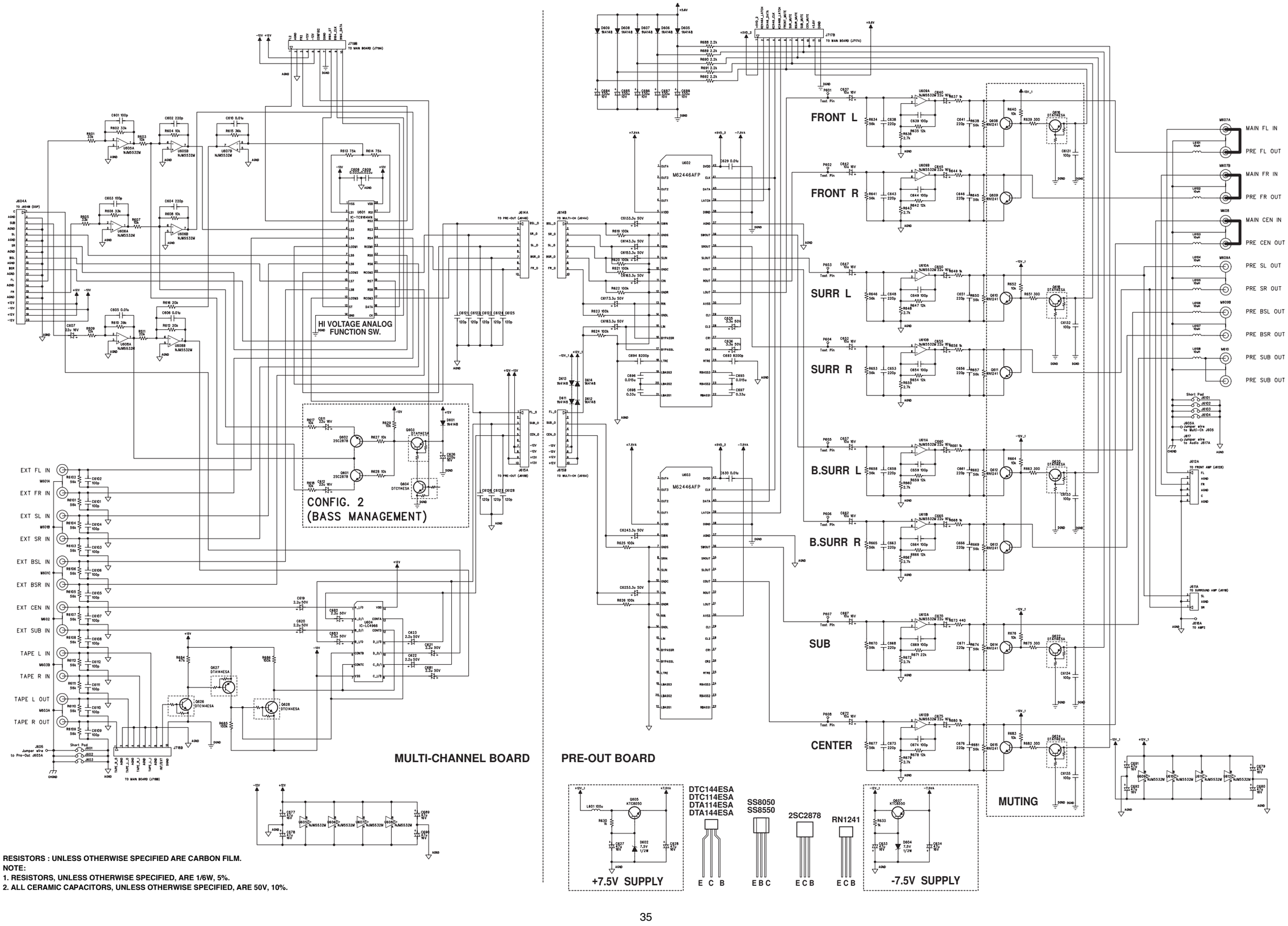
MULTI-CH / PRE-OUT



RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

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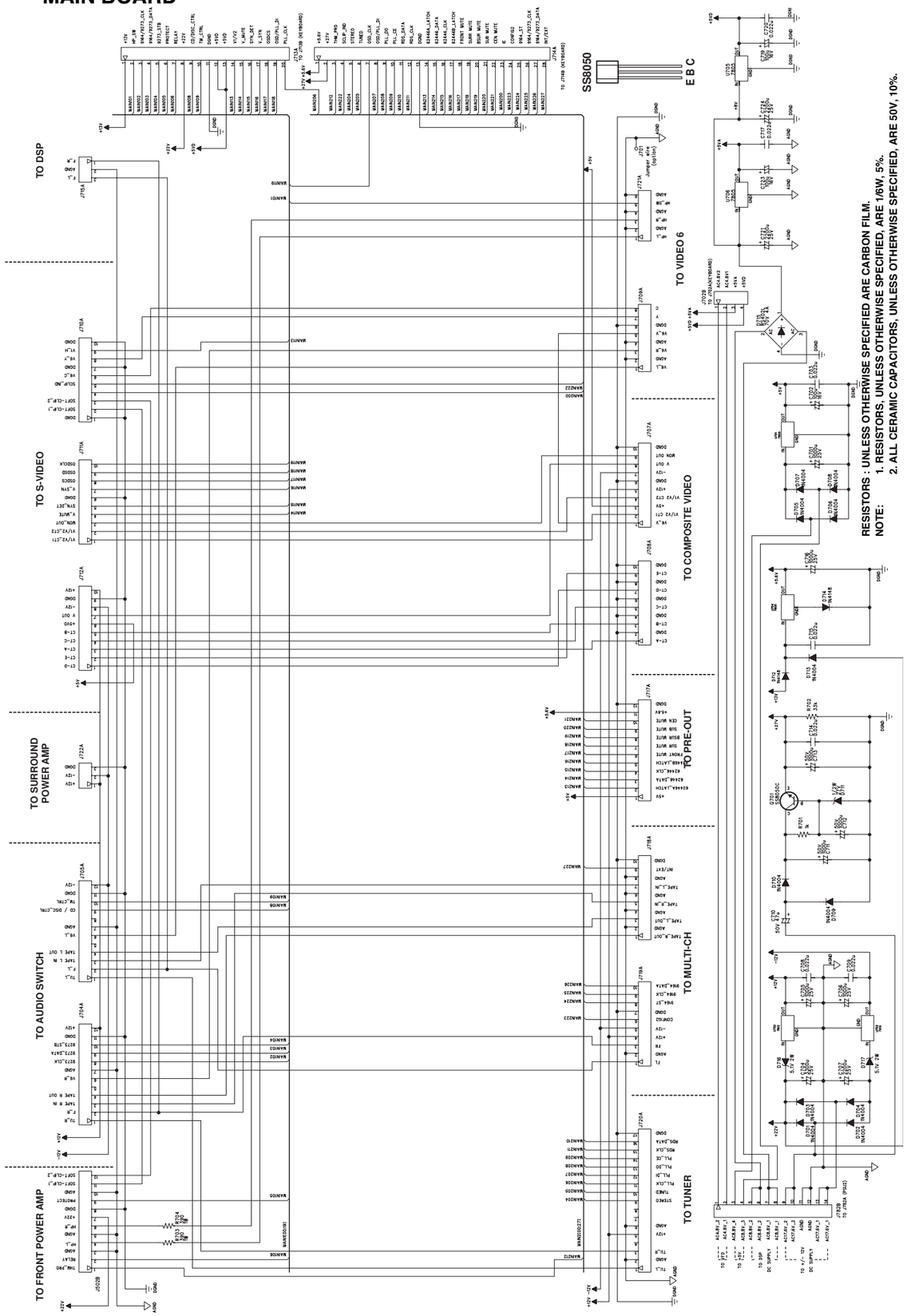
MAIN BOARD



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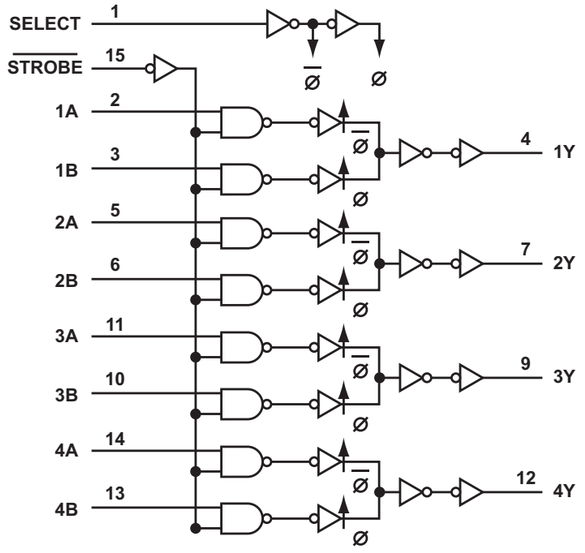
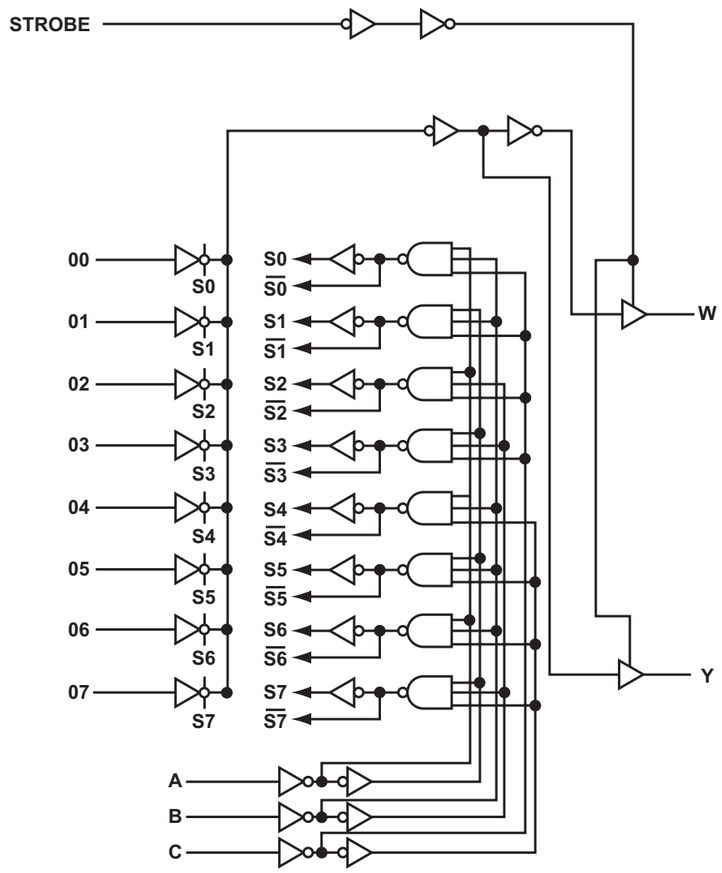
IC BLOCK DIAGRAM

74HC157
DSP BOARD: U1004

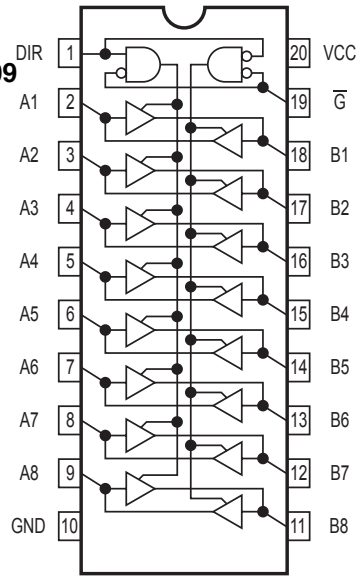


74HC251
DSP BOARD: U1071

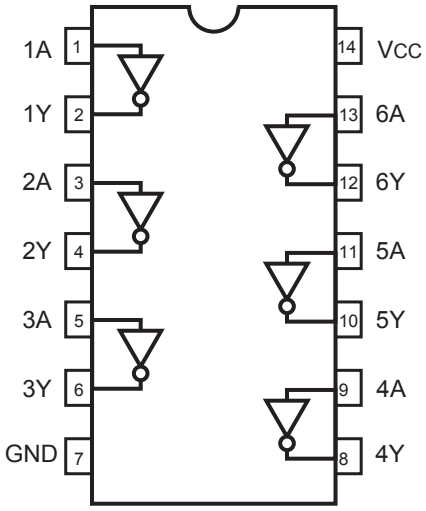


74LVC245
DSP BOARD: U1002, U1003, U1014

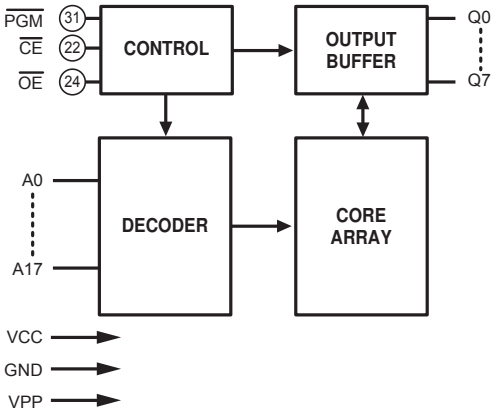
74VHC245
KEYBOARD: U209



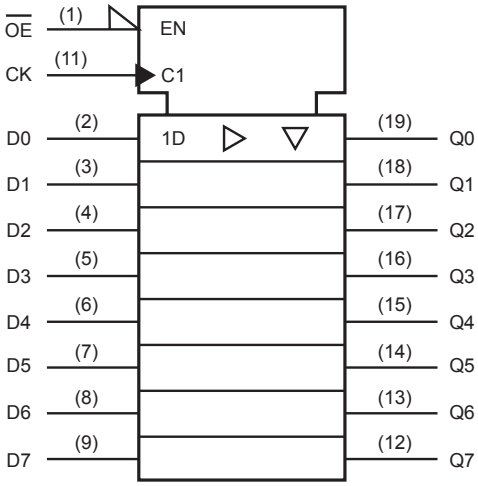
74HCU04
DSP BOARD: U1006 & U1016



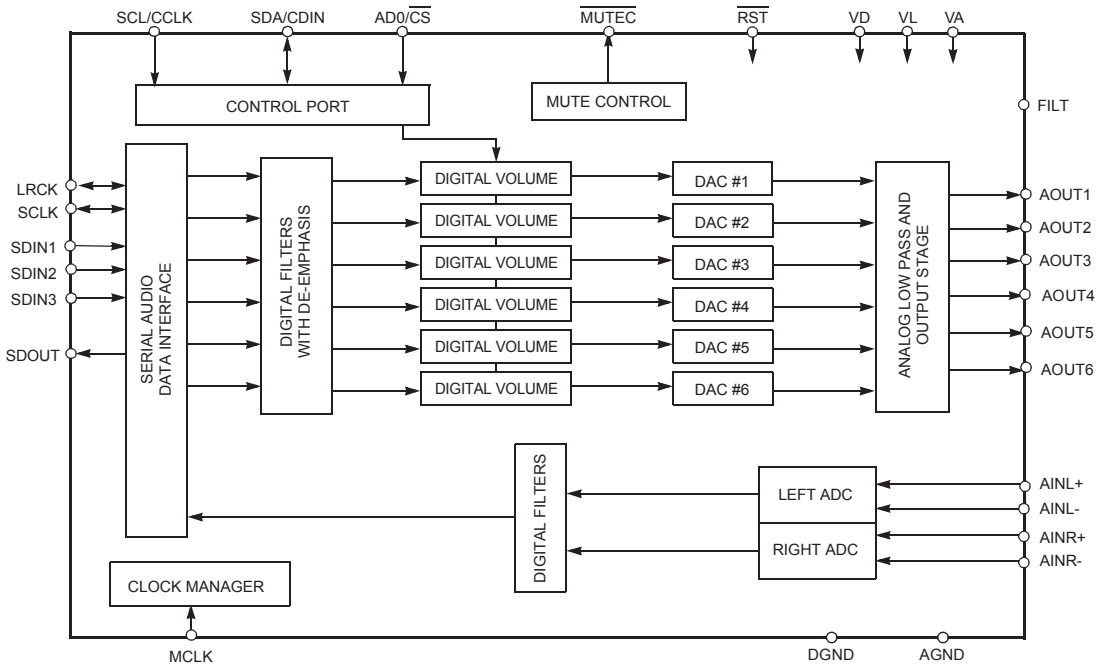
W27C020
DSP BOARD: U1007



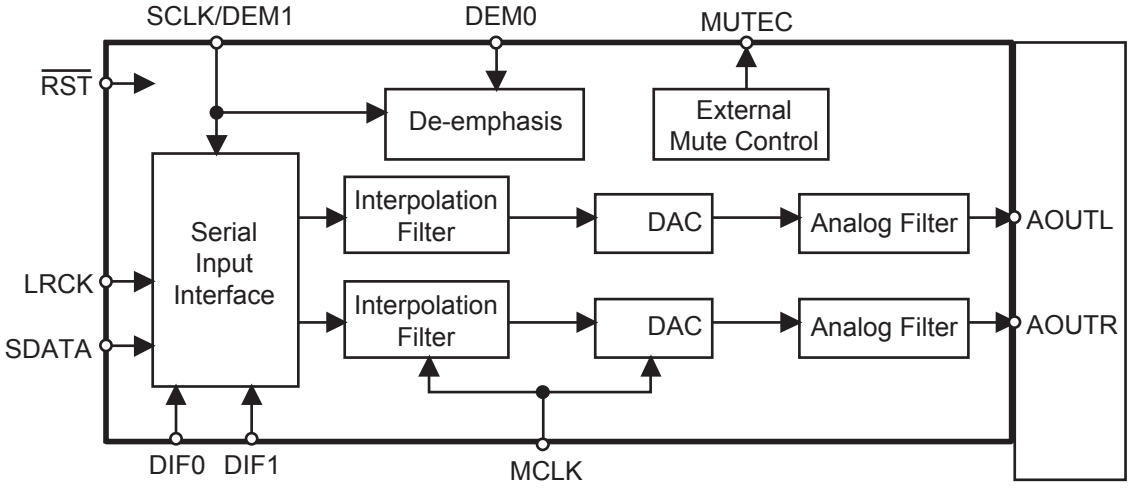
74LVC574
DSP BOARD: U1008, U1009



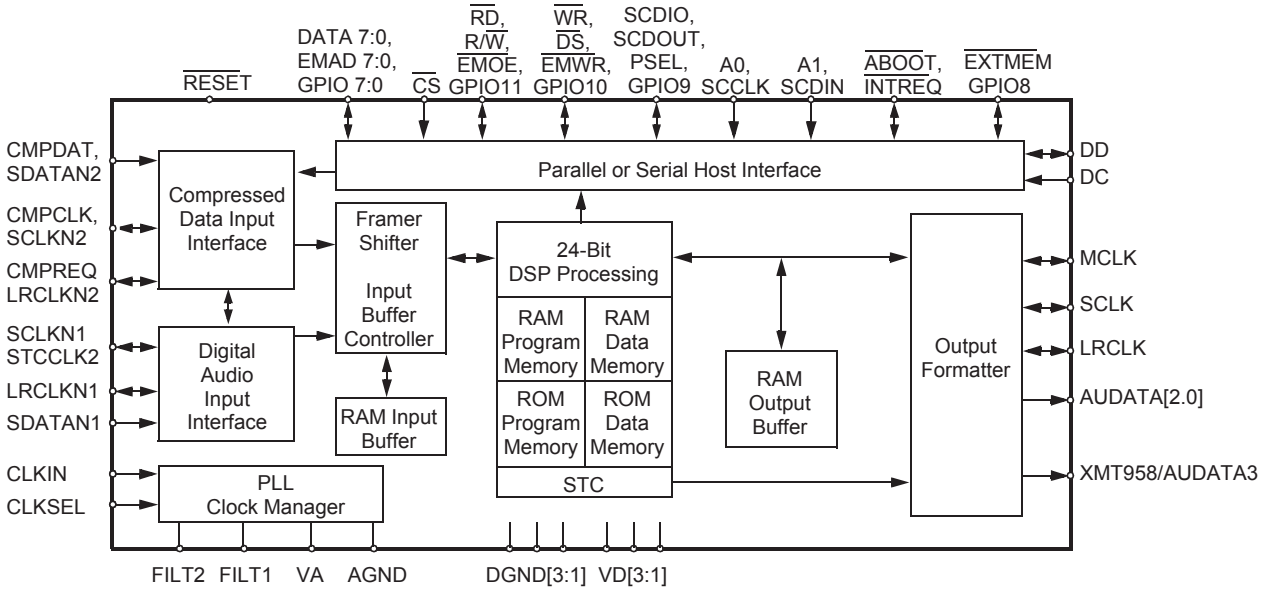
CS4228
DSP BOARD: U1021



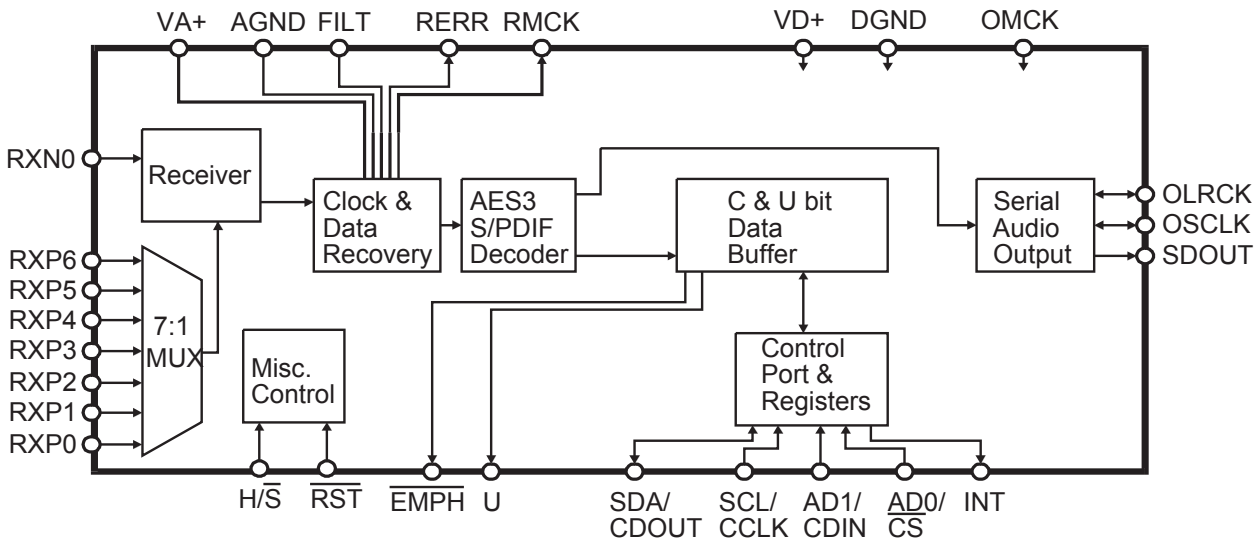
CS4340
DSP BOARD: U1022



CS49326
DSP BOARD: U1001

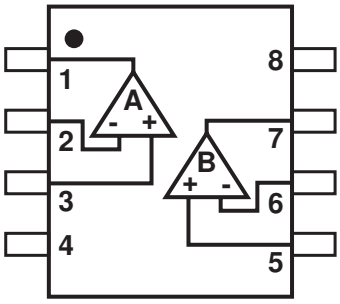


CS8415A
DSP BOARD: U1005

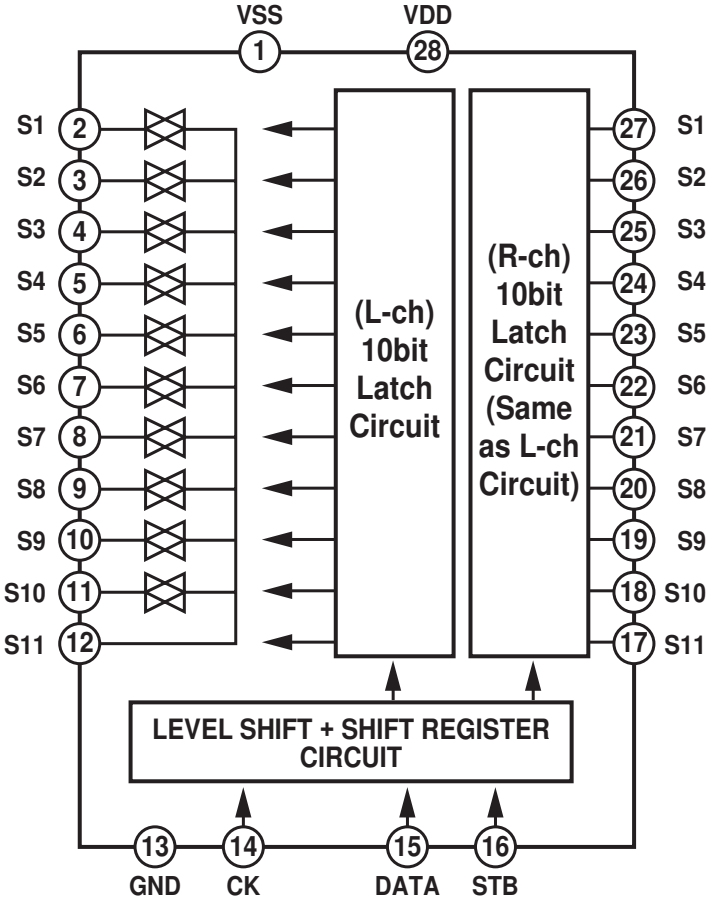


NJM5532
DSP BOARD: U1010~U1013, U1023 & U1025
MULTI-CHANNEL: U605~U608
PRE-OUT BOARD: U609~U612

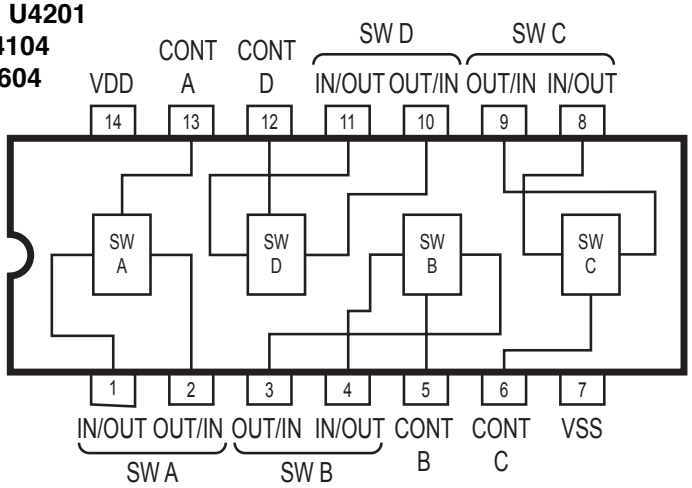
NJM4558D
SURROUND AMP BOARD: U801



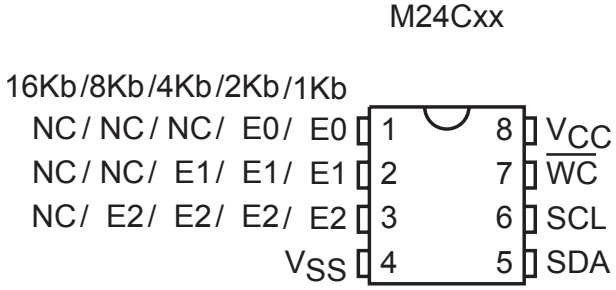
TC9273
AUDIO BOARD: U301



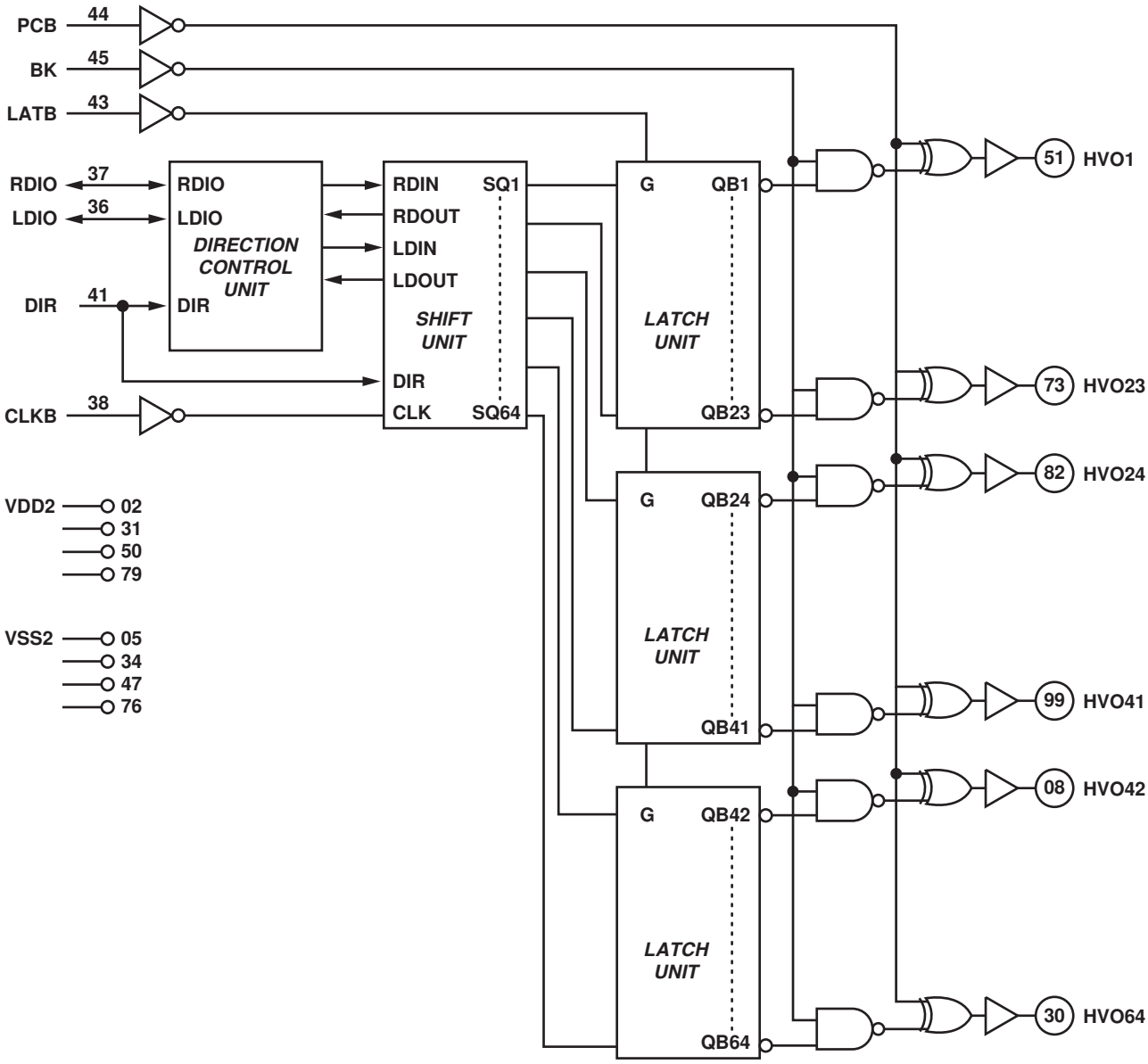
LC4966
AUDIO BOARD: U302 & U303
COMPOSITE VIDEO: U4201
S-VIDEO BOARD: U4104
MULTI-CHANNEL: U604



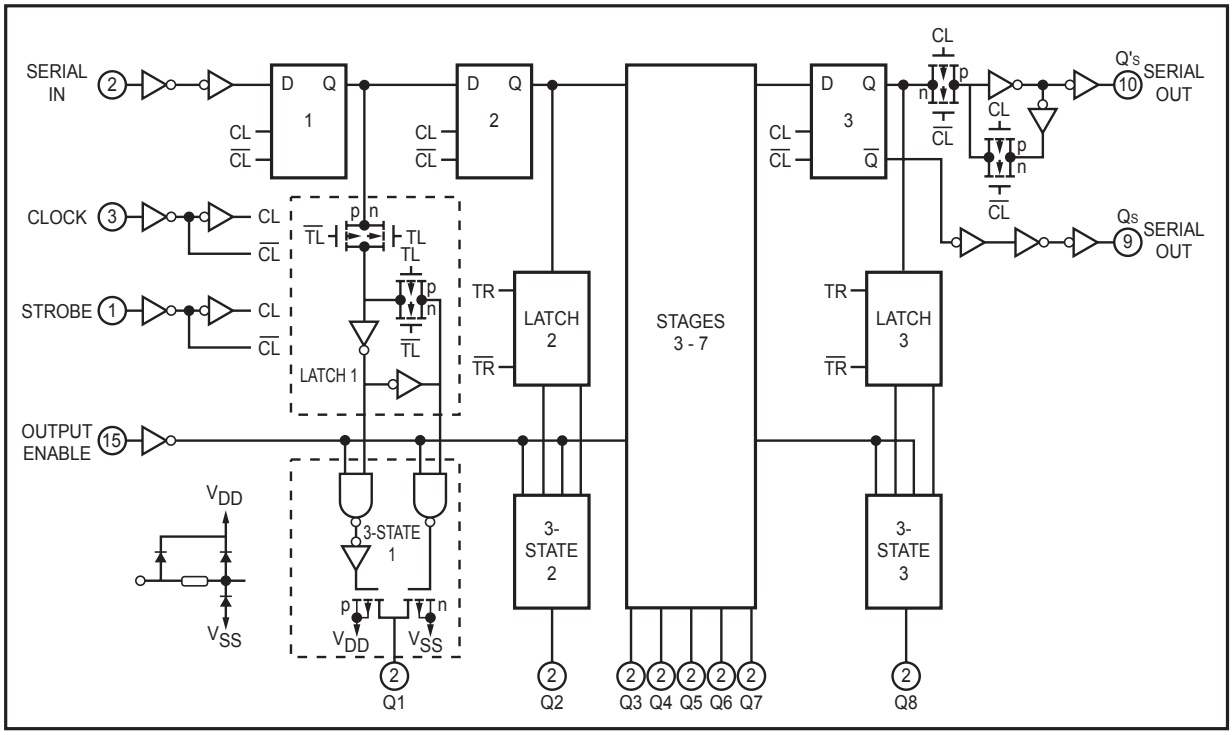
M24C16
KEYBOARD: U210



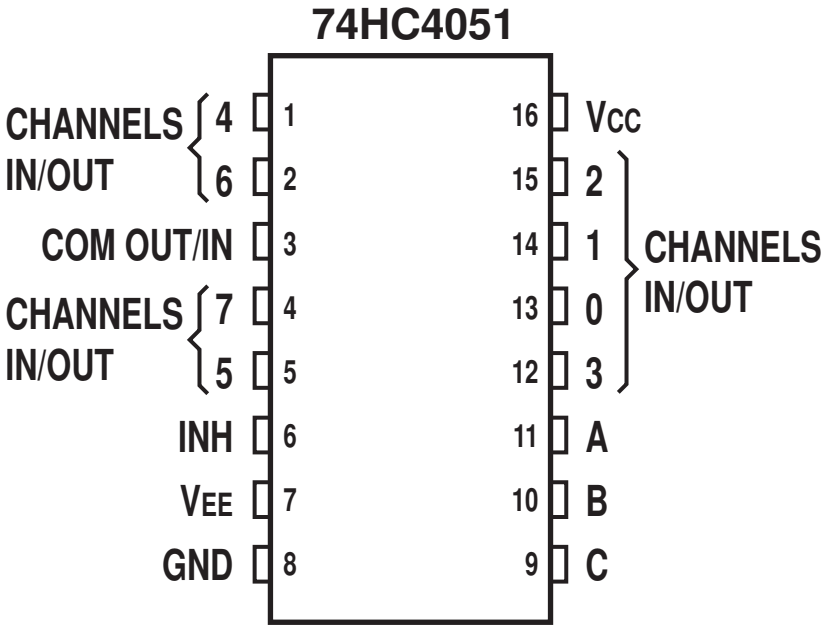
PT6306
KEYBOARD: U203



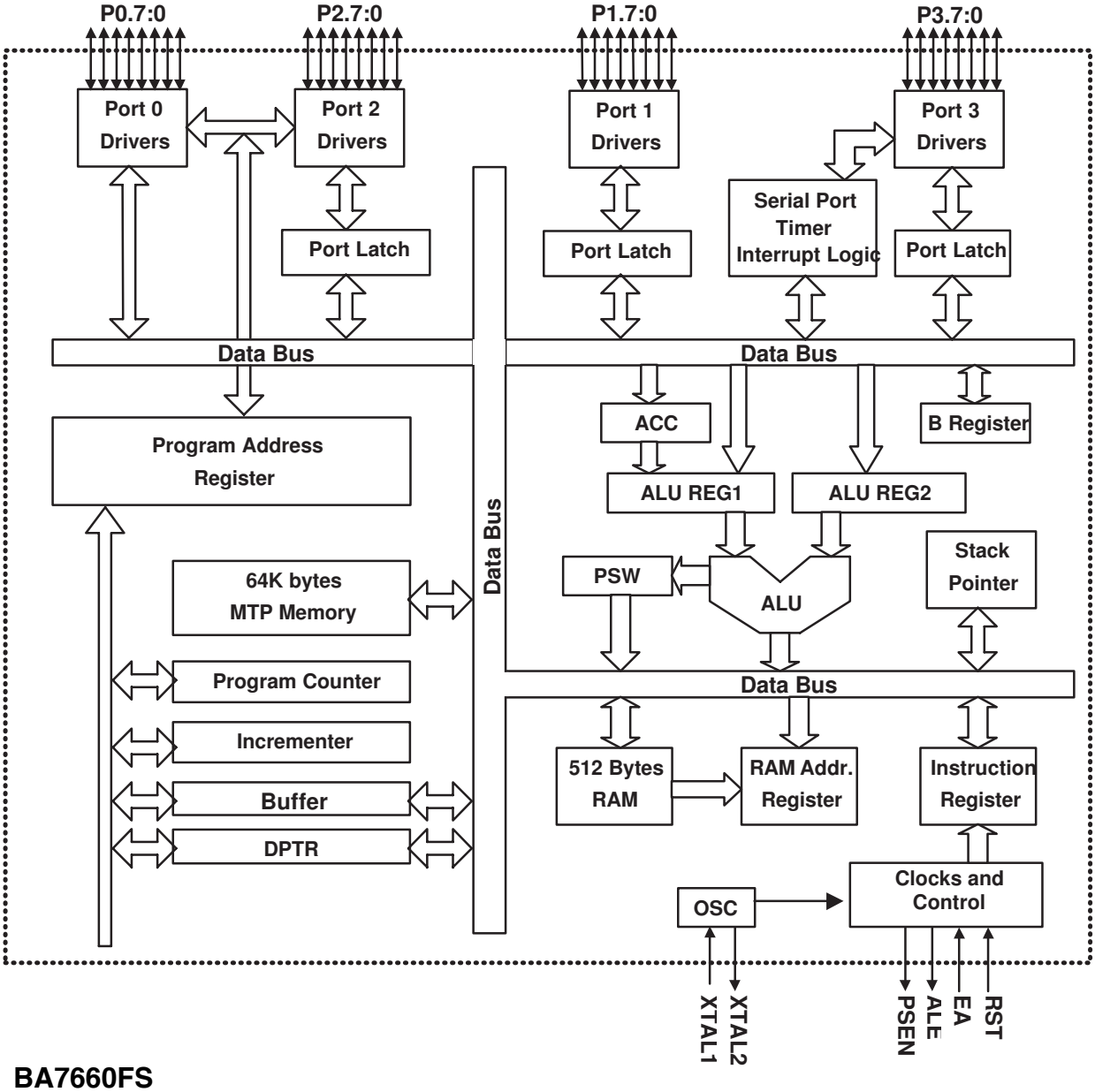
HCF4094B
KEYBOARD: U204~U207



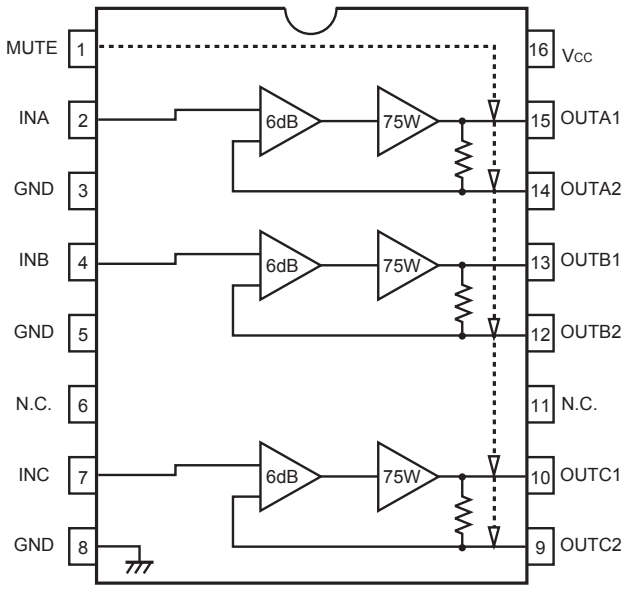
74HC4051
KEYBOARD: U208



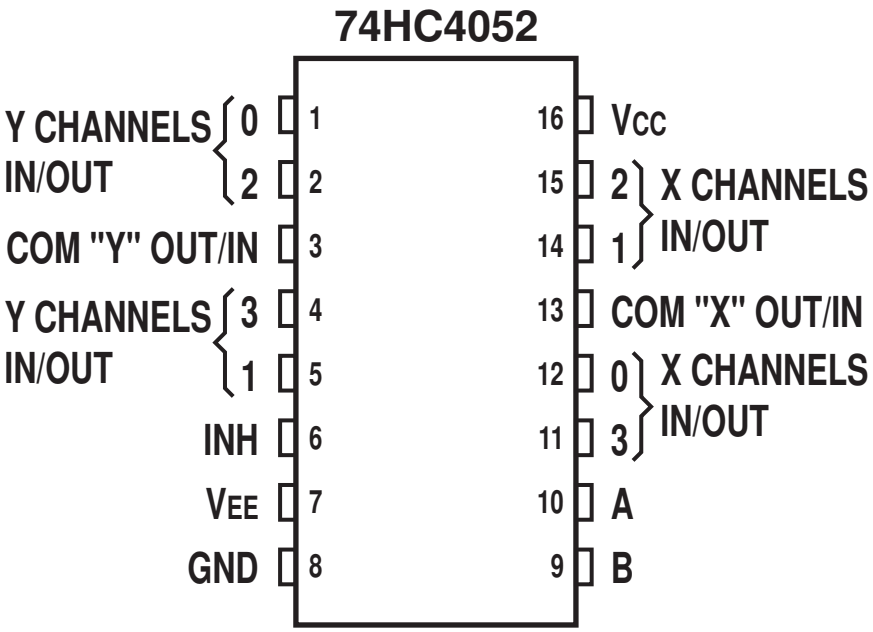
M6759
KEYBOARD: U201 & U202



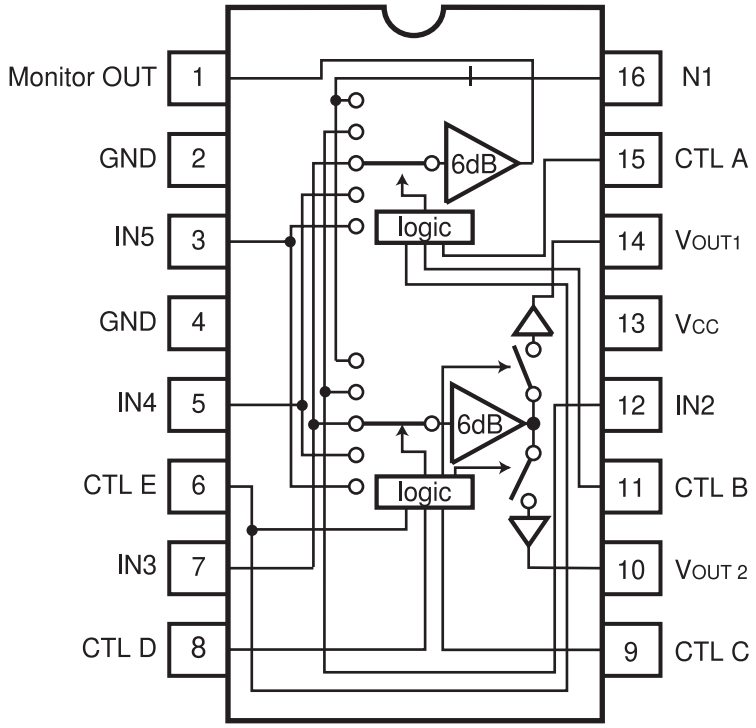
BA7660FS
COMPONENT VIDEO BOARD: U4301



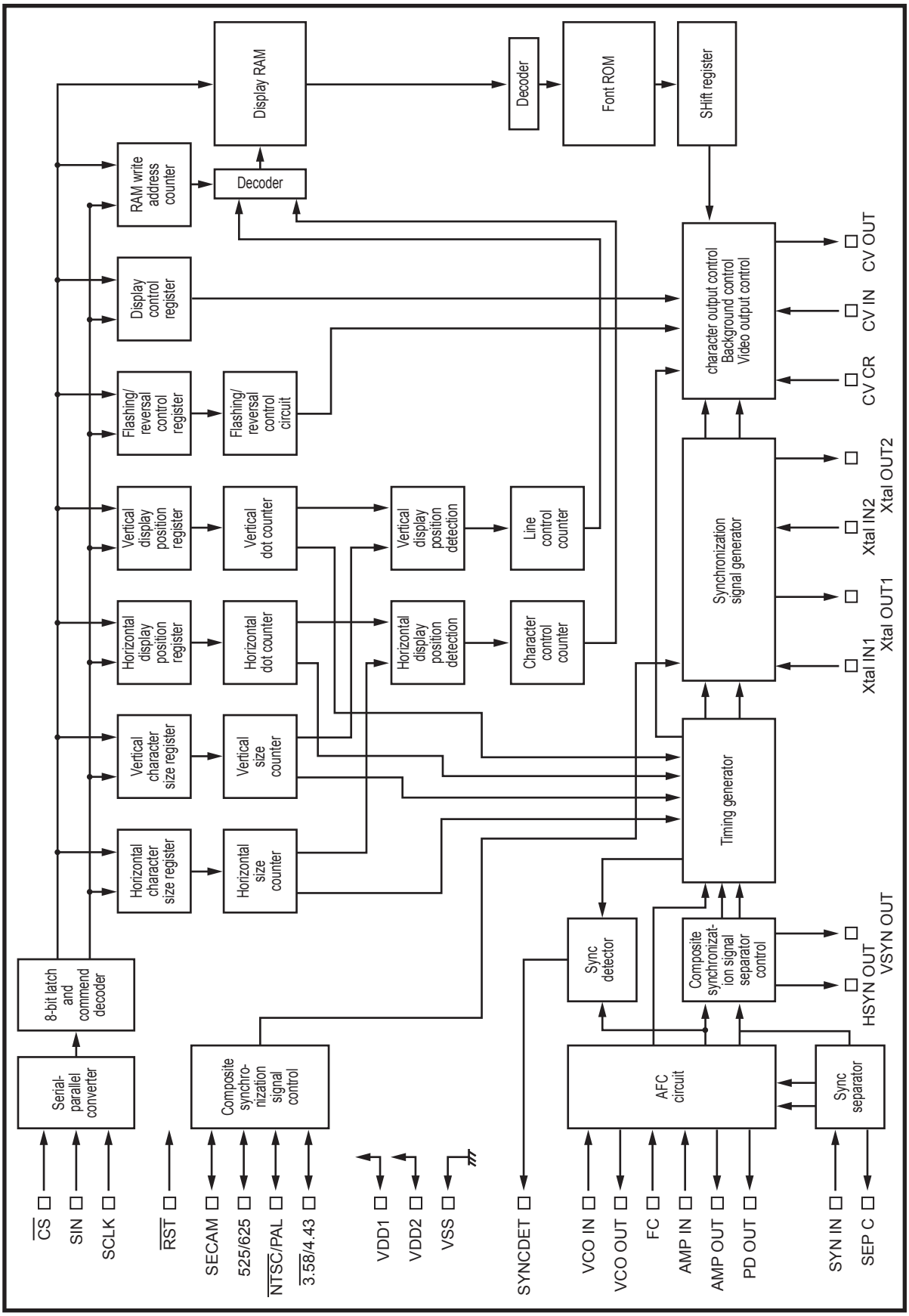
74HC4052
COMPONENT VIDEO BOARD: U4302 & U4303



BA7625
COMPOSITE VIDEO BOARD: U4202
S-VIDEO BOARD: U4102 & U4103

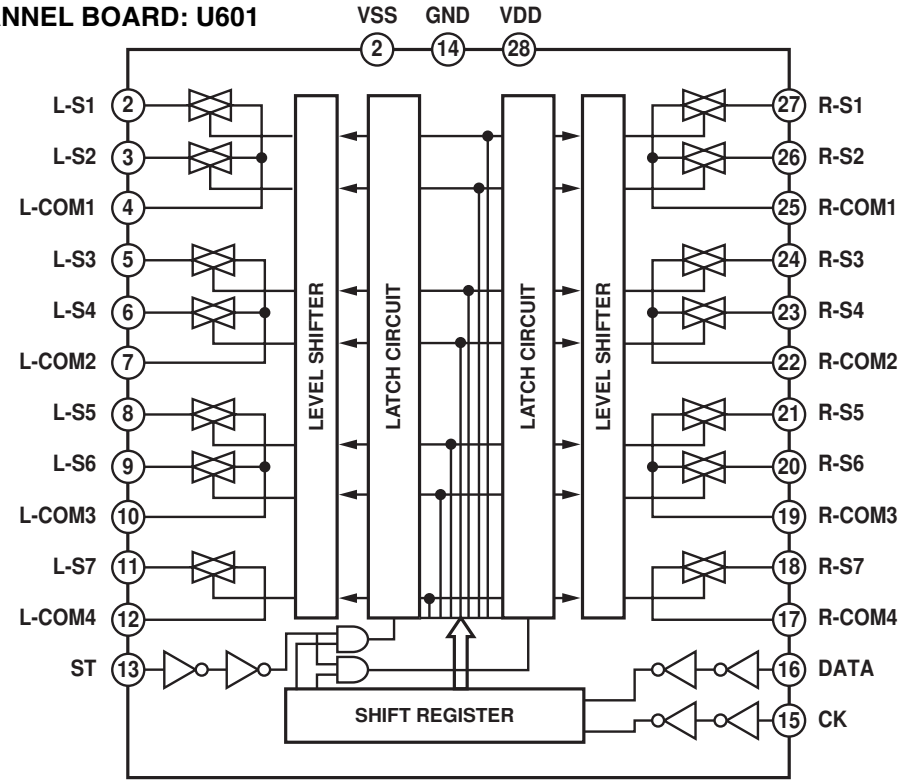


LC74763
S-VIDEO BOARD: U4101



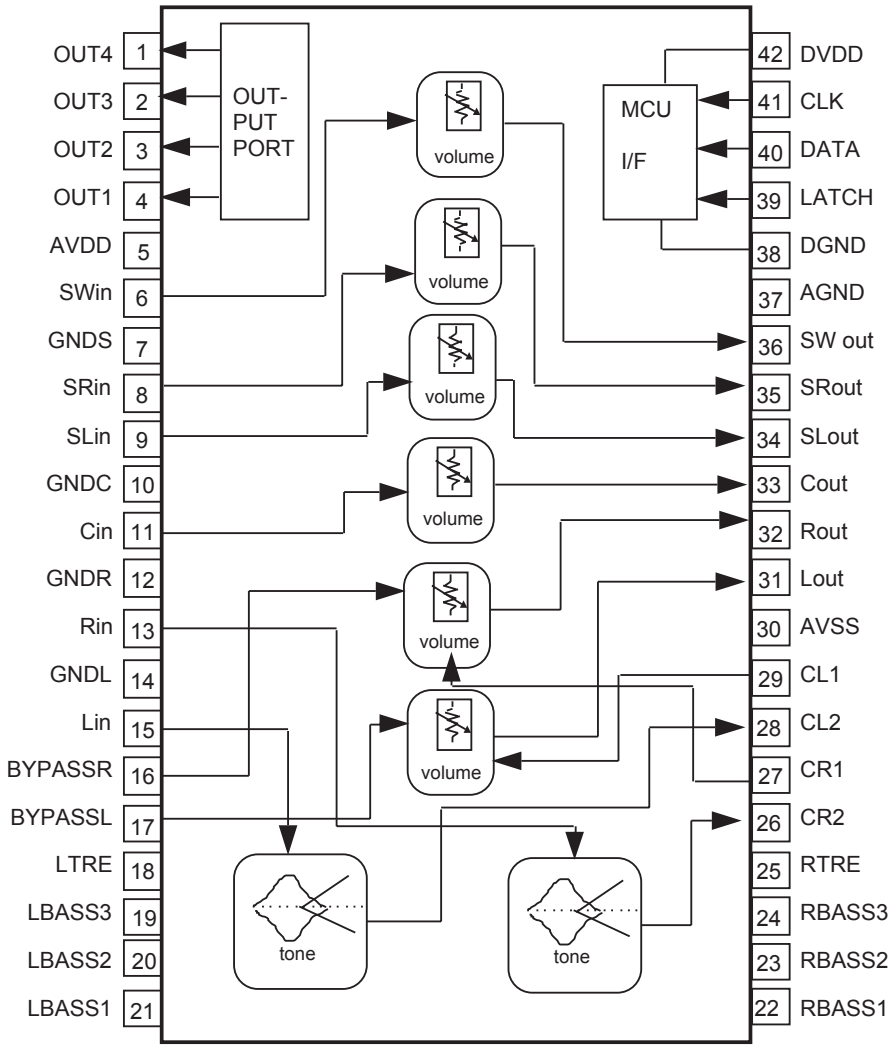
TC9164N

MULTI-CHANNEL BOARD: U601

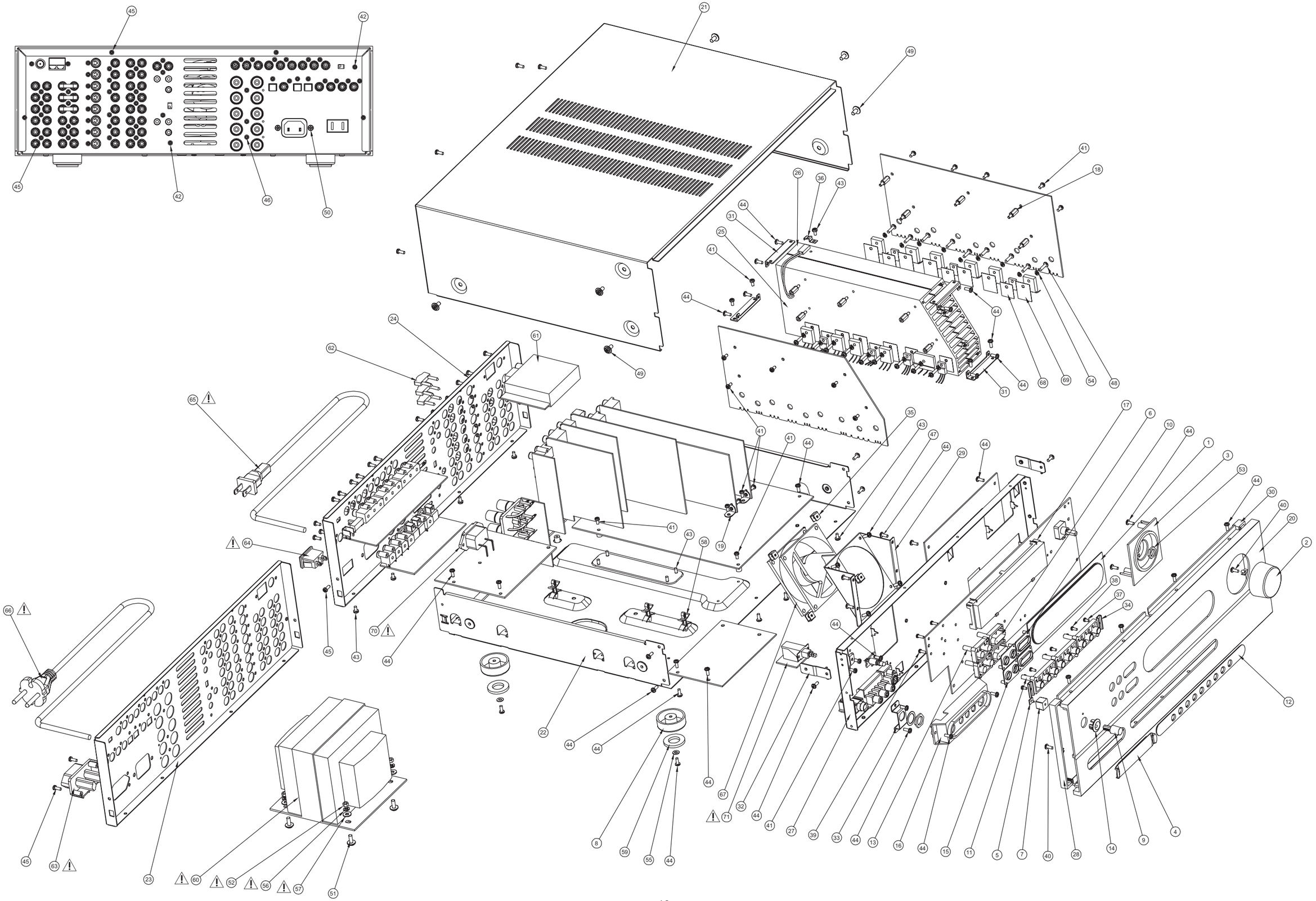


M62446FP

PRE-OUT BOARD: U602 & U603



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

Item	Part No.	Description	Qty.
1	10-0752001-00-10	WINDOW LENS	1
2	10-0752002-71-00	VOLUME KNOB ASSEMBLY	1
3	10-0752005-71-00	VOLUME BEZEL	1
4	10-0752007-01-00	VIDEO COVER	1
5	10-0752011-00-00	LED LENS	1
6	10-0752012-01-00	RACKER BUTTON	2
7	10-0752015-01-00	LED BEZEL	1
8	10-0752017-01-00	PLASTIC FOOT	4
9	10-0752022-01-00	POWER BUTTON	1
10	10-0752025-01-00	RACKER BEZEL	2
11	10-0752032-01-00	INPUT BUTTON	3
12	10-0752035-71-00	INPUT BUTTON LOZENGE	1
13	10-0752042-01-00	DUO BUTTON	2
14	10-0752045-01-00	POWER BUTTON BEZEL	1
15	10-0752055-01-00	DUO BEZEL	2
16	10-0752065-01-00	VIDEO HOUSING	1
17	10-0752075-01-00	DISPLAY BRACKET	1
18	11-0570065-20-00	HEX SPACER	10
19	11-0570075-80-00	L BRACKET	2
20	11-0752000-95-10	FASCIA	1
21	11-0752003-85-10	TOP COVER	1
22	11-0752004-80-00	BOTTOM CHASSIS	1
23*C	11-0752006-94-10	REAR PANEL (C)	1
24*AH	11-0752006-94-10	REAR PANEL (AH)	1
25	11-0752008-80-00	EXTRUDED HEATSINK L	1
26	11-0752018-80-00	EXTRUDED HEATSINK R	1
27	11-0752025-80-00	SUBFASCIA	1
28	11-0752028-95-00	SIDE CAP L	1
29	11-0752035-80-00	FAN MOUNTING BRACKET	1
30	11-0752038-95-00	SIDE CAP R	1
31	11-0752045-80-00	HEATSINK MOUNTING BRACKET	4
32	11-0752055-80-00	SIDE MOUNTING BRACKET	2
33	11-0752065-80-00	PHONE BRACKET	1
34	11-0752075-80-00	DUMMY BRACKET	2
35	11-1500005-80-00	U-BRACKET	4
36	11-2100135-80-00	CLIP THERMAL SWITCH	1
37	13-0260500-02-00	SCREW 2.6 X 5 NI-PLT	2
38	13-0260600-02-00	SCREW 2.6 X 6 NI-PLT	6
39	13-0260803-02-00	SCREW 2.6 X 8 NI-PLT	14
40	13-0300803-04-00	SCREW 3.0 X 8 NI-PLT	2
41	14-0300600-02-00	SCREW M3 X 6 NI-PLT	21
42	14-0300600-04-00	SCREW M3 X 6 BLK-PLT	2
43	14-0300600-52-00	SCREW 3.0 X 6 NI-PLT	10
44	14-0300800-53-00	SCREW 3.0 X 8 ZINC-PLT	47
45*C	14-0300800-54-00	SCREW 3.0 X 8 BLK-PLT	54
45*AH	14-0300800-54-00	SCREW 3.0 X 8 BLK-PLT	52
46	14-0301000-54-00	SCREW 3.0 X 10 BLK-PLT	3
47	14-0301003-04-00	SCREW M3 X 10 BLK-PLT	4
48	14-0301203-02-00	SCREW M3 X 12 NI-PLT	18
49	14-0400802-04-00	SCREW M4 X 8 BLK-PLT	6
50	14-0400803-44-00	SCREW 4.0 X 8 BLK-PLT	2

Item	Part No.	Description	Qty.
51	14-0401002-04-00	SCREW M4 X 10 BLK-PLT	4
52	15-0400320-07-20	NUT M4 X 3.2	4
53	15-0900220-11-30	NUT M9 X 2.2	1
54	16-0320560-09-20	SPRING WASHER	18
55	16-0350080-04-35	STEEL WASHER	4
56	16-0400074-10-31	SPRING WASHER	4
57	16-0400100-08-25	STEEL WASHER	4
58	17-0500960-00-01	PCB SUPPOT H=9.6MM	3
59	17-1402600-30-22	RUBBER FOOT	4
60 ⚠	25-0220054-30-18	POWER TRANSFORMER EI-114 115/230V	1
61*C ⚠	29-4000002-00-38	AM/FM TUNER MODULE KST-MB114MA-1-20	1
61*AH ⚠	29-4000003-00-38	AM/FM TUNER MODULE KST-MB114MA-1-22	2
62	34-0061030-00-60	JUMPER PLUG	3
63*C ⚠	34-0100002-00-78	AC OUTLET (C)	1
64*AH ⚠	34-0101001-00-70	AC OUTLET (AH)	1
65*AH ⚠	36-2061010-07-94	POWER CORD UL/CSA SPT-2 AWG 18X2	1
66*C ⚠	36-2283110-07-96	POWER CORD EURO-PLUG 10A/250V	1
67	37-2011225-00-63	FAN	1
68	38-1001500-00-65	SILICONE RUBBER	7
69	38-1030100-00-65	MICA 1.5KV 22 X 27 X 0.125MM	10
70 ⚠	34-0100002-00-70	AC INLET IEC 2 PIN 10A/250V	1
71 ⚠	35-0101109-00-67	POWER SW TV-8 10A 250V	1

NOTE:

THE COMPONENTS IDENTIFIED BY ⚠ MARK ARE CRITICAL FOR RISK OF FIRE AND ELECTRICAL SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

<*AH > : USA, CANADIAN MODEL ONLY.

<*C > : EUROPEAN MODEL ONLY.

ELECTRICAL PARTS LIST

Reference No.	Part No.	Description
FRONT AND CENTER AMPLIFIER BOARD		
PCB ASSEMBLY	80-0907520-40-00	FRONT AND CENTER AMP ASSEMBLY
SURROUND AMPLIFIER BOARD		
PCB ASSEMBLY	80-0907520-18-00	SURROUND AMP ASSEMBLY
DSP BOARD		
PCB ASSEMBLY	80-0907520-65-00	DSP ASSEMBLY
AUDIO BOARD		
TRANSISTORS		
Q301,Q303,Q307,Q309	21-0000120-70-14	XTR NPN HFE 68 30MHz SPT DTC144ES
Q302,Q308	21-0000450-70-14	XTR PNP 68 250MHz SPT DTA144ESA
CAPACITORS		
C317-C332	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
C333-C334	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
ICS		
U301	27-7892730-24-11	I.C. ANALOG SW SMD TC9273F-004
U302,U303	27-9496600-21-02	I.C. QUAD BILATERAL SWITCH LC4966
U304	27-7055320-18-14	I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M
RCA JACKS		
M303	34-4040420-00-60	RCA JACK 4 R-R/W-W GOLD RS-453G-04
M301-M302	34-4060420-00-60	RCA JACK 6 R-R-R/W-W-W GOLD RCA-653D-04
COMPONENT VIDEO BOARD		
TRANSISTOR		
Q4301	21-0000120-70-14	XTR NPN HFE 68 30MHz SPT DTC144ES
CAPACITORS		
C4301-C4306	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
C4310-C4312,C4325	22-3100022-00-43	CAP ELEC SS 10uF 16V 20%
C4313-C4315	22-3106052-00-43	CAP ELEC SS 1uF 50V 20%
C4316,C4318,C4320	22-3101022-00-43	CAP ELEC SS 100uF 16V 20%
C4317,C4319,C4321	22-3220022-00-43	CAP ELEC GS 22uF 16V 20%
ICS		
U4301	27-5176600-18-23	I.C. VIDEO 3-CH 75 OHM DRIVER BA7660FS
U4302-U4303	27-0140520-18-00	I.C. SINGLE DUAL TRIPLE M74HC4052MIR

Reference No.	Part No.	Description
RCS JACKS		
M431-M432,M434	34-4032020-00-60	RCA 3 G-BL-R GOLD RS-354G-18
SWITCH		
S4301	35-4102209-00-67	SW SLIDE 2P2T JSK022N09-G09
DIGITAL BOARD		
FIBRE OPTICAL		
J1008	26-6691386-00-16	FIBRE OPTIC TRANSMITTER GP1FA550TZ
J1005-J1006	26-6701380-01-16	FIBRE OPTIC RECEIVING UNIT GP1FA550RZ
CAPACITORS		
C1066, C1067	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
IC		
U1024, U1026	27-0804990-18-00	I.C. HEX INVERTER M74HCU04MIR
RCA JACKS		
J1001-J1004,J1007	34-4010320-00-60	RCA JACK 1 BLACK GOLD RS-146G/B
KEYBOARD		
DIODES		
D212,D214-D218	20-0000000-00-13	DIODE SW 4NS DO35 IN4148
D213	20-3262902-00-01	DIODE ZENER BZX55 6.2V 1/2W 5%
D219	20-1001401-20-44	DIODE RECT 1A/400V D041 1N4004
D220	20-3251902-00-01	DIODE ZENER BZX55 5.1V 1/2W 5%
TRANSISTORS		
Q202-Q206	21-0000010-00-46	XTR NPN HEF 100 200MHz C1815Y
CAPACITORS		
C203-C206	45-0100054-52-57	CAP CER SMD 10pF 50V 5%
C207,C214	22-3100022-00-43	CAP ELEC SS 10uF 16V 20%
C208-C211	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
C212	22-3102012-00-28	CAP ELEC GR 1000uF 10V 20%
C201, C202, C213, C215-C220	45-0104056-57-57	CAP CER SMD 0.1uF 50V 20%
C222, C241, C242	45-0102055-55-57	CAP CER SMD 1nF 50V 10%
C223	45-023055-55-57	CAP CER SMD 1nF 50V 10%
IR		
D201	26-0941380-00-00	IR RX 940nm 37.9KHz SHIELD ST FM-7138TE5
ICS		
U201(A/V-R)-U202(VFD)	27-1086400-04-87	I.C. MCU 8 BIT 64KROM 512 BYTE M6759 (sold as a pair)
U203	27-9630600-14-62	I.C. VFD DRIVER PT6306
U204-U207	27-0540940-18-00	I.C. 8-STAGE BUS REGISTER HCF4094BM1

Reference No.	Part No.	Description
U208	27-0140510-18-00	I.C. MUX/DEMUX M74HC4051MIR
U209	27-0324591-18-00	IC OCTAL BUS TRANSCEIVER 74VHC245M
U210	27-2300225-00-00	I.C. EEPROM 2K BYTE 250nS M24C16-BN6
CRYSTAL		
X201-X202	28-5221200-06-19	CRYSTAL 22.1184MHZ 30ppm HC-49S
IC SOCKET		
U201A	34-6244000-00-79	IC SOCKET PLCC 44 FT
TACT SWITCHES		
S201-S217	35-1001117-00-67	SW TACT 1PIT 50mA/12V TM114BFJ
ENCODER		
M201	35-6001219-00-08	ENCODER ROTATRY L=20mm W/O CLICK ECB16
VFD		
VFD	41-4340100-00-13	VFD 16-BT-93GNK
RESISTORS		
R201-R207, R212, R213, R215, R219, R223-R224, R226-R227, R229, R231-R232	44-0100220-51-00	RES SMD 10K OHM 5%
R209-R210	44-0100520-51-00	RES SMD 10M OHM 5%
R233	44-0470220-51-00	RES SMD 47K OHM 5%
R216	44-0390020-51-00	RES SMD 390 OHM 5%
R217-R218	44-0150120-51-00	RES SMD 1.5K OHM 5%
R220, R236, R237	44-0470120-51-00	RES SMD 4.7K OHM 5%
R221, R230	44-0220120-51-00	RES SMD 2.2K OHM 5%
R222	44-0220020-51-00	RES SMD 220 OHM 5%
R238	44-0120220-51-00	RES SMD 12K OHM 5%
R241, R242	44-0100020-51-00	RES SMD 100 OHM 5%
LED BOARD		
LED		
D211	26-0012305-01-17	LED RED-GREEN 3RGSW-1-A
MAIN BOARD		
DIODES		
D701-D710,D713	20-1001401-20-44	DIODE RECT 1A/400V D041 1N4004
D711	20-3227002-00-47	DIODE ZENER BZX55 27V 1/2W 5%
D712,D714	20-0000000-00-13	DIODE SW 4NS DO35 IN4148
D715	20-5004700-50-02	DIODE BRI 4A/70V RS402L
D716-D717	20-3951943-50-01	DIODE ZENER ZY5.1 2W 10%
TRANSISTOR		
Q701	21-0000140-00-11	XTR NPN HFE 120 100MHz SS8050C

Reference No.	Part No.	Description
CAPACITORS		
C701,C705-C706,C716	22-3102032-00-28	CAP ELEC GR 1000uF 25V 20%
C702,C719,C723	22-3101022-00-43	CAP ELEC SS 100uF 16V 20%
C704	22-3332032-00-28	CAP ELEC GR 3300uF 25V 20%
C707,C721,C724	22-3222032-00-34	CAP ELEC GS 2200uF 25V 20%
C710	22-3470052-00-43	CAP ELEC SS 47uF 50V 20%
C711-C713	22-3102052-00-28	CAP ELEC GR 1000uF 50V 20%
REGULATORS		
U701,U704-U706	27-3000501-17-14	I.C. VOLT REG 5V 1A NJM7805FA
U702	27-3001201-17-14	I.C. VOLT REG 12V 1A NJM7812
U703	27-3101201-13-14	I.C. VOLT REG F NJM7912
MULTI-CHANNEL BOARD		
DIODE		
D601	20-0000000-00-13	DIODE SW 4NS DO35 IN4148
TRANSISTORS		
Q601-Q602	21-0000360-00-00	XTR NPN HFE200-700 30MHz 2SC2878A
Q603	21-0100390-70-14	XTR PNP HFE 30 250MHz SPT DTA 114ESA
Q604	21-0000400-70-14	XTR NPN HFE30 250MHz SPT DTC114ESA
Q626,Q628	21-0000120-70-14	XTR NPN HFE 68 30MHz SPT DTC144ES
Q627	21-0000450-70-14	XTR PNP 68 250MHz SPT DTA144ESA
CAPACITORS		
C607,C611-C612, C619-C622 C623,C681-C683	22-3220022-00-43	CAP ELEC GS 22uF 16V 20%
C626	22-3221022-00-43	CAP ELEC SS 220uF 16V 20%
C677-C690	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
RESISTORS		
J601-J603	44-0000027-11-00	RES SMD 0 OHM 5%
ICS		
U601	27-7891640-21-11	I.C. ANALOG FUNCTION SW TC9164AN
U604	27-9496600-21-02	I.C. QUAD BILATERAL SW LC4966
U605-U608	27-7055320-18-14	I.C. LOW NOISE OP-AMP NJM5532M
RCA JACKS		
M601	34-4060420-00-60	RCA JACK 6 R-R-R/W-W-W GOLD RCA-653D-04
M602	34-4020320-00-60	RCA JACK 2 B/B GOLD RS-253G-02
M603	34-4040420-00-60	RCA JACK 4 R-R/W-W GOLD RS-453G-04

Reference No.	Part No.	Description
PRE-OUT BOARD		
DIODES		
D602,D604	20-3275902-00-01	DIODE ZENER BZX55 7.5V 1/2W 5%
D605-D609, D611-D615	20-0000000-00-13	DIODE SW 4NS DO35 IN4148
TRANSISTORS		
Q605	21-0000140-00-11	XTR NPN HFE 120 100MHz SS8050C
Q607	21-0100131-00-11	XTR PNP HFE 170 1.5A SS8550C
Q608-Q615	21-0000350-70-00	XTR NPN HFE200-700 30MHz SPT RN1241A
Q616,Q618,Q620,Q622,Q624	21-0100390-70-14	XTR PNP HFE 30 250MHz SPT DTA 114ESA
Q617,Q619,Q621,Q623,Q625	21-0000400-70-14	XTR NPN HFE30 250MHz SPT DTC114ESA
CAPACITORS		
C613-C618, C624-C625, C635-C636	22-3336052-00-43	CAP ELEC SS 3.3uF 50V 20%
C627-C628, C633-C634	22-3101022-00-43	CAP ELEC SS 100uF 16V 20%
C679-C680, C691-C692	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
C637, C642, C647, C652, C657, C662, C667,C672	22-3100022-00-43	CAP ELEC SS 10uF 16V 20%
C640, C645, C650,C655, C660, C665, C670, C675	22-3220022-00-43	CAP ELEC GS 22uF 16V 20%
C684-C688	22-3331022-00-28	CAP ELEC GR 330uF 16V 20%
C693-C694	22-4182203-10-10	CAP MYLAR KT-G 8.2nF 100V 10%
C695-C696	22-4115303-10-28	CAP MYLAR MCC-R 15nF 100V 10%
C697-C698	22-4233402-00-31	CAP MPF 0.33uF 63V 5%
RESISTORS		
J6101-J6104	44-0000027-11-00	RES SMD 0 OHM 5%
INDUCTOR		
L601	24-0101108-00-28	IND CHOKE 100uH 10%
ICS		
U602-U603	27-7262446-10-01	I.C. VOL/TONE CONTROL M62446FP
U609-U612	27-7055320-18-14	I.C. LOW NOISE OP-AMP NJM5532M
RCA JACKS		
M607	34-4040500-00-60	RCA JACK 4 R-W/R-W GOLD RS-413G-08
M608,M610	34-4020300-00-60	RCA JACK 2 B/B GOLD RS-213G-02
M609	34-4040400-00-60	RCA JACK 4 R-R/W-W GOLD RS-413G-04
POWER SUPPLY BOARD		
CAPACITORS		
C763 ⚠	2-1103470-35-45	CAP CER ECKDRS 10nF 400VAC +80/-20%

Reference No.		Part No.	Description
RESISTORS			
R751	⚠	23-5228330-00-00	RES FUSIBLE 0.22 OHM 10% 1/2W
R754*AH	⚠	23-0395230-00-00	RES CF 3.9M OHM 5% 1/2W
RELAY			
M751*C	⚠	32-3112100-02-97	RELAY 12VDC/10A SPST PCB OMI-SS-112LM
M751*AH	⚠	32-1012100-01-97	RELAY 12VDC/10A 1P1T
DIODE			
D751		20-0000000-00-13	DIODE SW 4NS D035 IN4148
D752-D755		20-1001401-20-44	DIODE RECT 1A/400V D041 1N4004
TRANSISTOR			
Q751		21-0000010-00-46	XTR SS NPN HEF 100 200MHz TO-92 C1815Y
LINE FILTER			
L752	⚠	24-5103050-01-25	LINE FILTER 10mH ET-24 NC-F0092-1
FUSES & FUSE HOLDERS			
F751*AH	⚠	33-0181001-01-88	FUSE TIME-LAG 8A/250VAC 5x20mm UL/CSA 5S
F752*AH	⚠	33-0111006-00-48	FUSE 1.6A 250V TIME LAG LBC 5x20mm UL/CSA/VDE/SEMKO
F751*C	⚠	33-0161002-00-48	FUSE TIME-LAG 5A/250VAC 5 X 20mm VDE TSD
F752*C	⚠	33-0151006-00-48	FUSE 800mA 250V TIME LAG LBC 5x20mm UL/CSA/VDE/SEMKO
FH751-FH752	⚠	33-1000000-00-88	FUSE CLIP 0.05mm FC-53-11
POWER SWITCH BOARD			
CAPACITORS			
C764	⚠	22-1103470-35-45	CAP CER ECKDRS 10nF 400VAC +80/-20%
POWER SWITCH			
S751	⚠	35-0101109-00-67	SW POWER TV-8 10A 250VAC PS3-22SPA-P7AZ
SECONDARY BOARD			
JUMPER BAR			
JMP1-JMP4		11-0752007-80-01	JUMPER BAR DIA1.5 X 25 R.1
RECTIFIER			
D781		20-5125401-50-02	BRIDGE RECTIFIER 25A 400V MP254W BR-25W
TRANSISTORS			
Q781-Q782		21-0100410-00-12	XTR PNP HFE 480-960 110MHz 2SA1016KG-AA

Reference No.	Part No.	Description
CAPACITORS		
C790-C791	22-3123072-00-41	CAP ELEC LP 12000uF 80V 20%
C781-C789	22-4210402-00-31	CAP MPF 0.1uF 63V 5%
RESISTORS		
R784-R785	23-2228232-00-00	RES MO 0.22 OHM 5% 1/2W
R790,R793 ⚠	23-4228280-08-20	RES CE 0.22 OHM 5% 5W
R781-R783 ⚠	23-5228330-00-00	RES FUSIBLE 0.22 OHM 10% 1/2W
SPEAKER BOARD		
SPEAKER TERMINALS		
M5101	34-3000022-00-60	SPEAKER TER 4P R/B W/O PLUG PT-430A-03
M8101	34-3000021-00-60	SPEAKER TER 6P R/B W/O PLUG PT-630A-03
S-VIDEO BOARD		
DIODES		
D4101-D4107	20-0000000-00-13	DIODE SW 4NS DO35 IN4148
TRANSISTORS		
Q4101,Q4103,Q4122	21-0000120-70-14	XTR NPN HFE 68 30MHz SPT DTC144ES
Q4102	21-0000450-70-14	XTR NPN 68 250MHz SPT DTA144ESA
Q4107-Q4112,Q4116-Q4119	21-0100370-70-14	XTR PNP HFE 270-560 140MHz 2SA933AS
Q4113-Q4114,Q4121,Q4124-Q4125, Q4128-Q4130	21-0000360-00-00	XTR NPN HFE200-700 30MHz 2SC2878A
Q4115,Q4126-Q4127	21-0000390-70-14	XTR NPN HFE270-560 180MHz 2SC1740S
Q4120,Q4123	21-0000380-70-14	XTR NPN HFE20 250MHz DTC-123ESA
CAPACITORS		
C4101-C4107,C4109-C4111,C4113-C4115, C4117-C4120,C4153,C4157	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
C4108,C4112,C4116,C4156	22-3471012-00-28	CAP ELEC GR 470uF 10V 20%
C4123-C4124	22-3221012-00-43	CAP ELEC SS 220uF 10V 20%
C4133,C4141	22-3106052-00-43	CAP ELEC SS 1uF 50V 20%
C4134,C4145,C4149	22-3101012-00-43	CAP ELEC SS 100uF 10V 20%
C4136,C4146	22-4247402-00-31	CAP MPF 0.47uF 63V 5%
C4137,C4144	22-3477052-00-43	CAP ELEC SS 0.47uF 50 20%
C4138	22-7300210-00-01	CAP VC 30pF 20%
C4150,C4158	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
C4151	22-3100022-00-43	CAP ELEC SS 10uF 16V 20%
INDUCTORS		
L4101	24-0569107-00-28	IND CHOKE 5.6uH 10%
L4102	24-0220107-00-28	IND CHOKE 22uH 10%

Reference No.	Part No.	Description
ICS		
U4101	27-5574763-21-02	I.C. OSD LC74763-9012
U4102,U4103	27-5076250-21-23	I.C. AV SWITCH BA7625
U4104	27-9496600-21-02	I.C. QUAD BILATERAL SWITCH LC4966
CRYSTALS		
X4101	28-5143200-06-19	CRYSTAL 14.318MHz 30ppm HC-49S
X4102	28-5177200-06-19	CRYSTAL 17.73447MHz 30ppm HC-49S
DIN JACKS		
M411-M418	34-4110300-00-60	DIN JACK 1 BLACK MD-113
TRIGGER BOARD		
DIODE		
D351	20-3251902-00-01	DIODE ZENER BZX55 5.1V 1/2W 5%
TRANSISTOR		
Q351	21-0000380-70-14	XTR NPN HFE20 250MHz DTC-123ESA
REGULATORS		
U351-U352	27-3001291-07-14	I.C. VOLT REG 12V 100mA 78L12
JACKS		
M351	34-4020420-00-60	RCA JACK 2 R-W GOLD RS-253-04
M353,M355	34-4310300-00-60	PHONE JACK 1 BLACK 3.5mm RIGHT ST-030-07
M354,M352	34-4320300-00-67	PHONE JACK 3.5mm 2P RIGHT JY-3552-01-330
SWITCH		
S351	35-4102209-00-67	SW SLIDE 2P2T JSK022N09-G09
VIDEO-6 BOARD		
CAPACITORS		
C4401-C4403	22-3226052-00-44	CAP ELEC SS 2.2uF 50V 20%
JACKS		
J4401	34-4510302-00-60	PHONE JACK D6.3 1 ST-016S-01
M4401	34-4010000-01-60	RCA JACK 1 YELLOW GOLD RS-105G/Y
M4402	34-4110300-00-60	DIN JACK 1 BLACK MD-113
M4403	34-4010200-01-60	RCA 1 WHITE GOLD RS-105AG/W
M4404	34-4010100-01-60	RCA JACK 1 RED GOLD RS-105AG/R
VIDEO BOARD		
TRANSISTORS		
Q4201-Q4203	21-0100370-70-14	XTR PNP HFE 270-560 140MHz 2SA933AS

Reference No.	Part No.	Description
CAPACITORS		
C4201-C4203, C4205, C4207, C4209-C4210	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
C4204, C4206, C4208, C4211	22-3471012-00-28	CAP ELEC GR 470uF 10V 20%
ICS		
U4202	27-5076250-21-23	I.C. AV SWITCH DIP BA7625
U4201	27-9496600-21-02	I.C. QUAD BILATERAL SWITCH LC4966
RCA JACKS		
M421-M422	34-4040020-00-60	RCA JACK 4 Y-Y/Y-Y GOLD RS-454-03

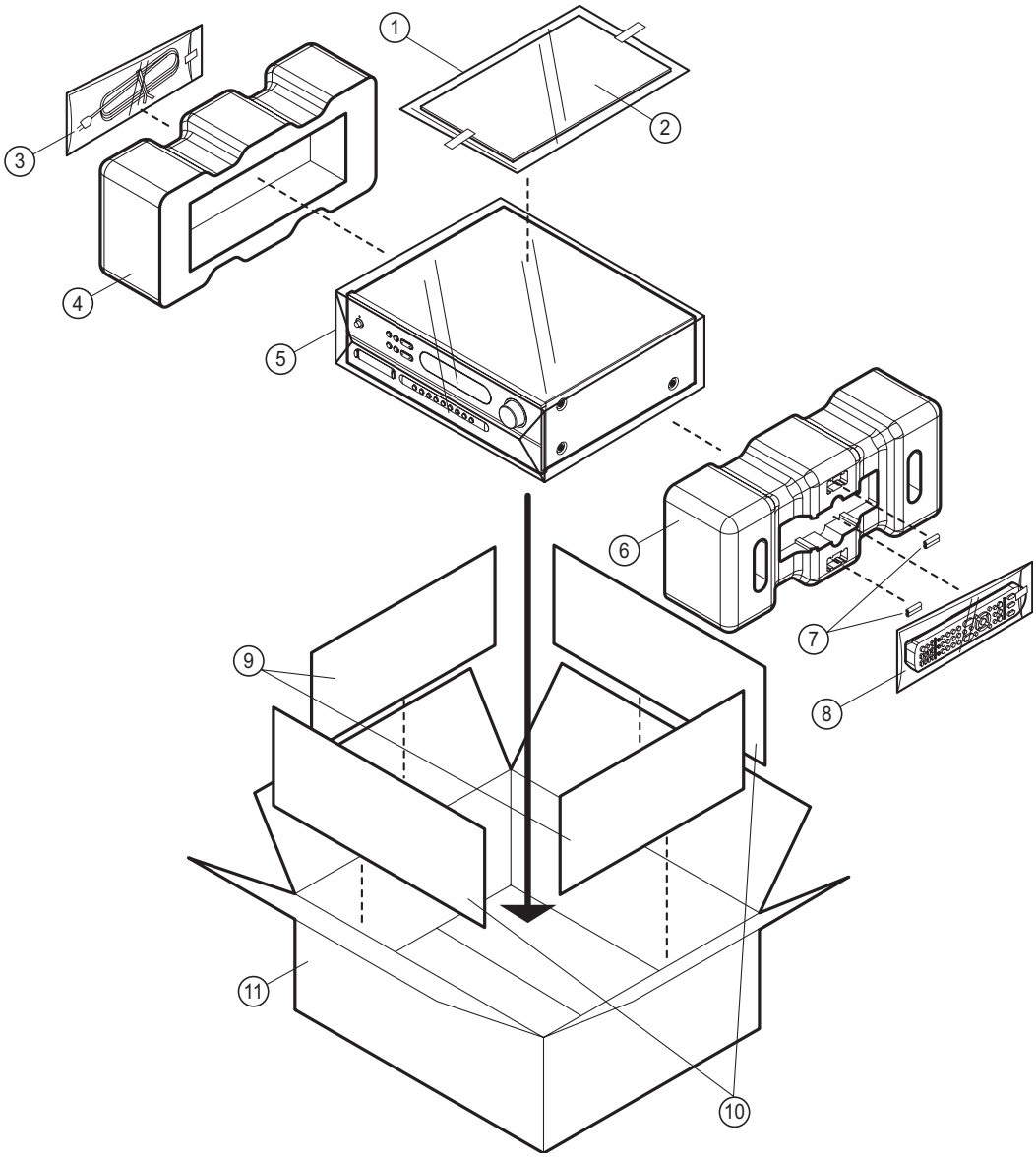
NOTE: THE COMPONENTS IDENTIFIED BY ⚠ MARK ARE CRITICAL FOR RISK OF FIRE AND ELECTRICAL SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

<*AH > : USA, CANADIAN MODEL ONLY.

<*C > : EUROPEAN MODEL ONLY.

RESISTORS: MO-METAL OXIDE, CE-CERAMIC CASE.

PACKING DIAGRAM



Item	Part No.	Description	Qty.
1	64-0200001-01-00	POLYBAG MANUAL	1
2	61-0752004-42-99	OWNER'S MANUAL GB/F/D/NL	1
	61-0752004-43-99	OWNER'S MANUAL E/I/P/S	1
	31-6472801-00-28	AM LOOP ANTENNA	1
	31-6407520-00-98	FM ANTENNA	1
	34-0081004-00-48	300 TO 75 OHM ADAPTOR	1
3	36-2061010-07-94 *AH	POWER CORD	1
	36-2283110-07-96 *C	POWER CORD	1
4	63-0752001-00-01	POLYFOAM ENDCAP L	1
5	64-0700001-00-01	POLYBAG UNIT	1
6	63-0752002-00-00	POLYFOAM ENDCAP R	1
7	37-0020200-00-79	BATTERY AAA 1.5V	4
8	83-0752000-00-04	REMOTE HANDSET NAD HTR-2	1
9	67-0752002-11-99	CARTON SHEET 490 X 225 MM	2
10	67-0752001-10-99	CARTON SHEET 560 X 225 MM	2
11	67-0752000-10-99	CARTON BOX	1

VERSION HISTORY

SERIAL NUMBER	SOFTWARE VER.	PCB ASSEMBLY VERSION
R28T75200001-R28T75200050	8.3	***A6 PCB ASSEMBLY*** KEYBOARD, DSP BOARD, TRIGGER BOARD, MAIN BOARD, VIDEO 6 BOARD, PRE-OUT BOARD, MULTI-CHANNEL BOARD, SECONDARY BOARD, LED BOARD, DIGITAL BOARD, POWER SWITCH BOARD, COMPONENT VIDEO BOARD. ***A7 PCB ASSEMBLY*** FRONT & CENTER AMP BOARD, SUR ROUND AMP BOARD, AUDIO BOARD, S-VIDEO BOARD, COMPOSITE VIDEO BOARD, POWER SUPPLY BOARD, SPEAKER BOARD.
R28T75200051-R28T75200280	8.3	***A6 PCB ASSEMBLY*** KEYBOARD, DSP BOARD, TRIGGER BOARD, MAIN BOARD,VIDEO 6 BOARD, PRE-OUT BOARD, MULTI-CHANNEL BOARD, SECONDARY BOARD, LED BOARD, DIGITAL BOARD, POWER SWITCH BOARD. ***A7 PCB ASSEMBLY*** FRONT & CENTER AMP BOARD, SUR ROUND AMP BOARD, AUDIO BOARD, S-VIDEO BOARD, COMPOSITE VIDEO BOARD, POWER SUPPLY BOARD, SPEAKER BOARD, COMPONENT VIDEO BOARD.
R28T75200401-R28T75200481	V1.02.A6	***A6 PCB ASSEMBLY*** KEYBOARD, DSP BOARD, TRIGGER BOARD, MAIN BOARD,VIDEO 6 BOARD, PRE-OUT BOARD, MULTI-CHANNEL BOARD, SECONDARY BOARD, LED BOARD, DIGITAL BOARD, POWER SWITCH BOARD. ***A7 PCB ASSEMBLY*** FRONT & CENTER AMP BOARD, SUR ROUND AMP BOARD, AUDIO BOARD, S-VIDEO BOARD, COMPOSITE VIDEO BOARD, POWER SUPPLY BOARD, SPEAKER BOARD, COMPONENT VIDEO BOARD.
R28T75200281-R28T75200400 R28T75200482-R28T75200681	V1.04.07	ALL ARE A7 PCB ASSEMBLY
R29T75200682-R29T75201253	V1.06.07	ALL ARE A7 PCB ASSEMBLY
R29T75201254-R29T75202800	V1.06.07	ALL ARE A8 PCB ASSEMBLY
R2XT75203301-R2XT75203460	V1.06.07	ALL ARE A7 PCB ASSEMBLY
R2XT75202801-R2XT75203300 R2XT75203461-R2XT75203514	V1.06.07	ALL ARE A8 PCB ASSEMBLY
R2XT75203515-R2XT75204550	V1.06.07	ALL PCB ASSEMBLIES MARKED 55-0752XXX-XX-01
R2YT75204551-R2YT75205374 R2YT75205601-R2YT75206060	V1.06.07	ALL PCB ASSEMBLIES MARKED 55-0752XXX-XX-01

NOTES:

SERVICE MANUAL

T 752

AV SURROUND SOUND RECEIVER

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